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IMPLICATIONS OF DECLINING ENROLMENT for the SCHOOLS OF ONTARIO

A STATEMENT OF EFFECTS AND SOLUTIONS

The Commission on Declining School Enrolments in Ontario

October 31, 1978

Toronto, Ontario



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SCHOOLS OF ONTARIO

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A STATEMENT OF EFFECTS AND SOLUTIONS

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The Commission on Declining School Enrolments in Ontario

October 31, 1978

Toronto, Ontario

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Queen's Park
Toronto, Ontario

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I sought, and received, advice and assistance from many in the preparation of this Final Report, including even more than before from the authors of Working Papers and Information Bulletins. As before, too, I relied most heavily on the Chairmen of the Task Forces -- Dr. Michael Connelly, Mr. Howard B. Henderson, Dr. Edward Hickcox, Dr. John Holland, and Professor Vernon S. Ready of Queen's. For the demographic data I relied as usual on the tireless attention to detail which Mr. Saeed Quazi has always exhibited. I must acknowledge too, and with heartfelt thanks, my continuing indebtedness to the staff of Statistics Canada and to the staffs of various branches of the Ministry of Education and other Ministries of the provincial government who gave freely of their time, knowledge and information.

Because of the emphasis I have placed on economics and finance, especially public finance, in this report, I made heavy demands upon the time and efforts of Dr. Holland, which he gave freely and fully, and which I much appreciate. The operations of the Commission became almost solely the full responsibility of Mr. Henderson. He discharged his duties ably and fully, as he has from the beginning, but frequently, I suspect, at considerable personal inconvenience.

All of us responsible for the completion of the task wish to express once more our deep gratitude to the continued loyal, conscientious and effective services of the Commission staff. They have asked to remain anonymous, but of course all those who came in contact with us know them well and how hard they have worked, day and night, weekends and holidays, too, when the occasion demanded it. They have served us well, far beyond what I had dared hope, or deserved, and I trust that their new employers will also use their skills and talents to the full and appreciate their loyalty and devotion.

The responsibility is mine, of course, for any errors and omissions which may appear, and naturally for the views and opinions expressed.

The recommendations are mine, and for them I also take full responsibility. The task has been an onerous one, made more so by pressures induced by time limits I imposed for its completion. Nevertheless, I have enjoyed it, most significantly for the renewal of old friendships and the cultivation of new ones. Everywhere I went, I was received with the utmost courtesy and consideration; clearly, all understood that the search for solutions was a task for all of us to undertake together, not merely a job for me alone to perform.

Letter of Transmittal

October 31, 1978

The Honourable Bette Stephenson, M.D.
Minister of Education
Province of Ontario
22nd Floor, Mowat Block
Queen's Park
Toronto, Ontario
M7A 1L2

Dear Dr. Stephenson:

With the submission of my Final Report, which is attached, I have discharged the responsibility assigned to me just over a year ago. As promised it is short and to the point. Following a brief introduction and background, each of the chapters deals solely with the implications of declining school enrolments for the topic under consideration. As required under my terms of reference, I have for each chapter attempted to indicate a realistic estimate of the cost of implementing each recommendation, at least wherever this was relevant, since some costs cannot be expressed in terms of dollars and cents.

You will note that, above all other considerations, I have sought for reasonable and practical solutions to the problems posed. In many cases this has meant searching for a compromise between opposing alternatives for middle ground on which we could build for these uneasy and uncertain times.

I have felt it imperative to give considerable weight to today's economic conditions and financial constraints. If the economic experts who advise us are right, these conditions will continue in as extreme, if not a more extreme, form for the foreseeable future, certainly for the next decade and very possibly to the end of this century. What this means, in brief, is simply that many of the improvements in educational conditions which I would like to see made, and which must be made as soon as possible, just cannot be introduced today or in the immediate future. The necessary financial resources are not and will not be available. In fact, unless economic conditions improve considerably, and quickly, and more financial resources become available, we must lower our levels of expectations for our school system and plan for its systematic reduction in size and in the scope of its programs.

In terms of continued declines in school enrolments, all the projections now available for our province show clearly that the end of the elementary school decline is unlikely to be reached before 1986, and the secondary school decline not before 1994. As you are aware, births

continue to decrease steadily in number, well on into 1978, and none of the factors associated with this decrease (discussed in my First Interim Report) have changed. Indeed, the demographers in Canada now expect the appearance and continuance of the average-size family of 1.6 children, or even 1.5 children. Since net interprovincial migration of children for Ontario has recently become negative again, in 4 of the past 5 months, May to September, 1978, and the reports indicate that net international migration is unlikely to increase substantially, it is quite within the realm of possibility that elementary school enrolment could continue to decline until 1990 or so and secondary school enrolment continue its decline well past the year 2,000. My best guess, however, and it cannot be more than an informed guess, is that we will experience some relief from the decline in elementary school enrolment from the mid 1980's to the early 1990's and in secondary school enrolment from the mid 1990's onwards for a number of years. For the long-term, though, and by this I mean from the 1990's on, the pool of "potential" parents will decrease steadily in size as the cohorts of the Baby Boom of the late 1940's and 1950's reach the ages of 40 years and older and are replaced by the cohorts of the Baby Bust of the 1960's and 1970's.

The immediate future, therefore, and even the mid-long-term future, promises unrelenting pressures from declining school enrolments. While we must remain alert to the possibility of a change in fertility patterns, which would result in modest enrolment increases if begun after the next decade or two, we must also be aware of the fact that (if the pattern in Europe is followed here) enrolments may continue to decline gradually even to the end of this century. Fortunately, the sharpest drops in total enrolment will have been completed in about a decade, so some relief from the sharpest blows is in sight. If our more optimistic economists prove to be better prophets than some of their gloomy brethren, by then our economy should be well out of its slump and both unemployment and inflation will have dropped to tolerable levels. We then could regain, in the quality of education and in the equality of educational opportunity, any ground we may be forced to lose during the next decade. As I stated in each of my interim reports, however, I am confident that with the proper exercise of ingenuity and cooperation we need not lose during these trying days of the coming decade.

Our situation has turned out to be worse than I had anticipated a year ago, but I still prefer to view the future as a period of challenge and opportunity, and most definitely not one of crisis or disaster. That some persons at all levels of the school system are going to suffer disappointment and possibly some hardships is a consequence that cannot be avoided, but by working together we can ensure that few experience real suffering.

Our school programs will be forced to change, as indicated in a subsequent section, but this may prove to be more of a consolidation than a deterioration in quality, although the choice of options is unlikely to remain as broad and unrestricted as it is today. Some will claim that this will be a net gain, not a loss, in the education of our children and grandchildren. I do not fully accept that point of view.

In the text that follows, Madame Minister, I have wasted no words. Possibly I have been too blunt and forthright, but I think not. The issues are clear enough and in most cases the logical solution to each problem is fairly obvious. Therefore I have called the shots as I saw them, without attempting to adjust for political or other factors. I recognize, however, that you may be compelled to do so.

Yours sincerely,

*R.W.B. Jackson,
Commissioner*

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Preface

There is no simple solution to the problem of declining enrolment in Ontario because there are many problems, one for each board, and each one with unique features requiring unique solutions. Such differences exist even among the boards in a single metropolitan area, and certainly among boards in northern Ontario, despite common problems of isolation, sparsity of population and economic uncertainties in what are still frontier conditions. Even in regard to enrolment alone, one finds boards in reasonable proximity that exhibit rapid growth, a stable pattern and steep declines.

Indeed, as I come to the end of my investigations I am reluctantly forced to admit that I face a somewhat puzzling paradox: while many implications flow from the phenomenon of declining school enrolments, the decline itself does not pose any problems for education. In fact, many have argued before me that the "decline" presents an opportunity to improve education in Ontario, not an obstacle and certainly not a problem. It is the associated factors, largely economic, social and financial in nature, which pose the problems which require a solution and to which attention must be addressed.

Consequently, readers will note that throughout this report, and throughout my Second Interim Report on issues which had to be considered immediately, I speak only of the implications of declining enrolment on each aspect of education. I have defined the problems almost entirely in economic and financial terms, and expressed the solutions in those terms.

Since there is nothing we can do to stop the steady decline in enrolment of children and youth in our schools, we must learn to live with this phenomenon and strive to maintain the quality of education we provide in light of the unfavourable economic, social and financial conditions which prevail at present and which promise to remain our lot for many years to come.

In the first section of this report I have briefly reviewed the essential background, the economic and financial constraints under which we labour, and then stated as clearly and definitively as I am able the demographic facts of life which Canadians must learn to live with. I support my arguments and conclusions by references to recent studies completed and published by Statistics Canada and the Ontario Department of Treasury, Economics, and Inter-governmental Affairs, known as TEIGA. Section II, on the effects and implications of declining school enrolments, begins with the school programs, the core of the system and moves directly to the supporting services such as education of teachers, supervisory and other school officers. The machinery of operation, as represented in administration of the system, the selection, appointment and working conditions of all categories of staff follow. Then come school accommodation and, finally, the important problems of school finance, provincial and local, operating and capital, and sources of revenue. The report is completed, in Section III, with three appendices which list the recommendations, pull together the data on costs and present my concluding remarks on the process I have undergone, the lessons I have learned and the general conclusions I have reached.

I believe that I have managed to include all the important considerations in this Final Report. Readers will note that I have paid special attention to the short-term as well as the long-term implications, the unusual problems which affect the north as compared with the south and the rights and privileges of the Franco-Ontarian and Roman Catholic schools. In addition I have considered such matters as large vs. small boards, large vs. small schools, the unusual features of metropolitan areas and the growth problems of the newer suburbs which surround them. Special attention has also been given to the teaching of French as a second language, the teaching of English as a second language, particularly to immigrant groups, and to multiculturalism.

I have endeavoured to be reasonably optimistic in all my findings, stressing the challenges and the opportunities which await us in education. But in all cases I have sought conclusions and solutions which are in keeping with the economic and financial constraints under which

we must operate. Many have advised me that it is not my business to admit of such constraints and seek solutions within them. How easy it would be to build a Utopia and recommend, for example, an unlimited expansion of the teaching force through the imposition of smaller classes, regardless of costs, or to recommend expansion of the program to provide special services to each and every child, wherever he or she may be and whatever the cost.

But that is not a responsible or rational course of action. Instead I have tried to build my solutions within the bounds of our constraints. But never, I hope, have I lost sight of the overriding interests, and rights of our children and the experiences which are so necessary for their optimum development. If in this I have succeeded and have presented sensible and practical solutions, then I will be content that my job in this great province was done well. I have tried. It will be for others to judge the worth of my efforts and to complement the best and correct the faulty. But whatever happens, I am confident that our school system will survive, as it deserves to do for it is an excellent one. I foresee no radical changes in it nor any forsaking of it to follow the cries of the false prophets who would, in their frenzy, overthrow and destroy everything it has taken generations to accomplish.

Section I

The Social Context and Future of Ontario School Enrolments

Introduction

The concern of this report is for the relationships between demographic developments and present and future challenges to the school system. The emphases will be upon school enrolment changes and the maintenance of an efficient system of transferring resources from the economy of the province to the publicly-supported schools sector.

The first and second reports of this Commission focused first upon demographic developments as the source of challenges facing our education systems and then upon economics and finance as the source of constraints. That order reflected initial perceptions of the relative importance of and need for the two different classes of information. (It may also have reflected my professional specialization.)

In this Final Report economics and financial conditions will be treated first, followed by the new demographic realities. Two developments have determined this changed order. The first is the rapidly increasing awareness of Ontarians of evolving population configurations and the consequent problems for public services. The second is the mounting evidence and spreading realization over the past year that the main challenges facing the people who make decisions for our education systems do not come from declining enrolments, but from the economic and public-finance conditions that characterize the late 1970's and promise to be facts of life for some years to come. These conditions make it difficult to accommodate decreasing enrolments, but they are also conditions that would have made it far more difficult to accommodate to increasing enrolments.

Changing enrolment levels are an organizational and administrative challenge. But enrolment changes and their attendant problems have always been with us, or at least their presence has been more the rule than the exception. This province has a large corps of well trained, professional administrators to handle the organizational-administrative problems of declining enrolments and to advise the democratically elected school board trustees.

Almost every board and every school administrator will be making hundreds of decisions in response to new enrolment facts, but the decisions appropriate for one board or school may not be appropriate for any other. It is not expected that a report on changing enrolments in Ontario will be of immediate relevance to organizational or administrative problems peculiar to any local school system. In particular, the presentation of information on the social context of changing enrolments is not meant to show local authorities the administrative and policy choices they should make. It is meant to explain why they and their provincial counterparts face the choices they do and to prepare the way for some recommendations intended to improve the conditions under which they make such choices.

The aspects of the social environment dealt with are placed under either of two headings: economics and finance, or demography. That, in effect, avoids some of the exciting aspects of education sociology dealing with inter-personal behaviour in the classroom. That also passes over the grand themes of education and the social and political order. No doubt if we were to make basic changes in what goes on in schools or if we were to reorganize school and society relationships, the phenomena of changing enrolments and our economy might mean very different things for our schools than they do. However, the concern here is for the effects of important environmental changes on the schools we have, not upon schools of a different kind that we could conceivably have. This does not imply that changes in the character of public education are not important, or that they were not the subject of attention of this Commission. It means that under the present conditions our first concern must be for the maintenance and effective operation of the school system and for accommodation of education policy to new economic and demographic realities. In Chapter 1, Section B, the Second Interim Report, it was emphasized that significant changes in the character of the school system are inevitable and probably desirable. It was also noted that we must plan now to direct that evolution. However, the point was also made in the Second Interim Report and is made again here that bold departures in the organization of basic school and society relationships,

as well as dramatic changes in the internal activities of schools, must await the resolution of the pressing problems of maintaining the system in the present environment.

Chapter 1

Economic Conditions and Financial Arrangements

Ontario is a very wealthy jurisdiction and its citizens -- in their capacities as local ratepayers and provincial taxpayers -- are generous supporters of public education. Ontario has a large corps of highly qualified, well paid teachers and a high level of expenditure per pupil both by comparison with its own past and with other North American jurisdictions. There will be no case made in this report that Ontario spends too much on public education, nor that it spends too little. Ontario could probably spend considerably less on education than it does and still provide a system of education recognizably similar to the one it has. On the other hand, Ontario could spend considerably more on education than it does and still provide its taxpayers with high levels of private consumption and other public services.

To put Ontario's education expenditure behaviour into a national context, the following interprovincial comparisons are offered.

Expenditure Per Student by Province (Current Dollars)

Year	Nfld.	PEI	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
1970	413	526	564	597	782	910	704	655	833	748
1971	504	592	619	600	827	971	781	682	896	810
1972	574	648	690	686	884	1,044	876	757	969	876
1973	719	740	779	761	1,099	1,106	1,006	865	1,058	1,001
1974	843	987	917	879	1,276	1,271	1,165	1,038	1,208	1,188
1975	1,085	1,268	1,091	1,065	1,515	1,494	1,406	1,225	1,475	1,481
1976	1,245	1,437	1,424	1,245	1,642	1,758	1,592	1,457	1,634	1,751

Source: Statistics Canada, Elementary-Secondary Education-Financial Statistics, 1974-75, Ottawa, 1977, pp. 96-99.

Statistics Canada, Elementary-Secondary Education-Financial Statistics, 1975-76, Ottawa, July 1978, p. 60.

School Board Expenditure Per Capita of Population, by Province

Year	Nfld.	PEI	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
1974	239	249	235	229	296	304	258	255	294	260
1975	300	305	272	267	337	349	304	295	353	319
1976	340	339	348	304	350	406	338	339	383	372

Source: Statistics Canada, Elementary-Secondary Education-Financial Statistics, 1975-76, Ottawa, July 1978, p. 61.

Ontario ranks high among the provinces in propensity to spend on elementary and secondary education, but the historic gaps among the provinces are closing.

There is nothing magic, sacred or necessary about the present or recent levels of expenditure on education, per-pupil, in total, as a portion of total revenue or as a portion of provincial product. The present level and pattern of education expenditures is the product of countless sequential decisions made during a continuing political process. They will be noticeably different in a few years, and again a few years after that.

During the 1950's and 1960's education expenditures grew very rapidly in Ontario, in current dollar expenditures, as a part of provincial expenditures and as a part of gross provincial product.¹ Education expenditures have continued to grow in the 1970's, but they have lost their place as the pre-eminent expenditure category in the provincial budget and have ceased to grow faster than total provincial expenditures.² It is fair to say that the 1970's is not part of the epoch of dramatically increasing education expenditures in Ontario.

When attention is confined to the elementary and secondary school sectors (as opposed to the whole education budget category, including postsecondary), the story of the 1970's is more interesting for the shifting responsibilities assumed for those expenditures by the province

¹See First Interim Report, The Commission on Declining School Enrolments in Ontario, February, 1978, pp. 8 and 9.

²Ibid., pp. 8 and 9.

and the municipalities than for the changing quantities involved.^{1,2} This is particularly so when the quantities involved are expressed in constant-value (non-inflating) dollars. For example, an increase in school board expenditures of \$148 million (1970 dollars) from 1970 to 1975 amounted to a 9% increase in those expenditures, but a 30% increase in the provincial real-dollar contribution (grants) and a 13% decrease in the local real-dollar contribution (property taxes). The \$192 million (1970 dollars) increase from 1975 to 1978 amounted to about an 11% increase in those expenditures, but a 4% decrease in the provincial contribution and a 34% increase in the local contributions (cf. Second Interim Report, p. 34).

Education and the Economy: Changing Perspectives

During the 1950's and 1960's (especially the years 1961 to 1968) a great many economic and statistical studies were published, in Canada and elsewhere, making a strong case for treating education expenditures as investments and pointing to high returns on those investments. Probably the most influential research and writing supporting expansionary education policies was that of Edward Denison. His book, The Sources of Economic Growth in the United States and the Alternatives Before Us,³ published in 1962, became the model for a large number of similar studies in the mid-1960's. Gordon Bertram's The Contribution of Education to Economic Growth,⁴ published in 1966, was one of the most influential of such works produced in Canada. Its status as an Economic Council of Canada study appears to have lent weight to its relevance for policy making. Because Bertram concluded that education

¹Second Interim Report, The Commission on Declining School Enrolments in Ontario, July 1978, pp. 24, 26, and 34.

²Richard M. Bird, Financing Education in Ontario, Working Paper No. 2, Commission on Declining School Enrolments in Ontario, March 1978, p. 5.

³E.F. Denison, The Sources of Economic Growth in the United States and the Alternatives Before Us. New York: Committee for Economic Development, 1967.

⁴G. Bertram, The Contribution of Education to Economic Growth. Ottawa: Queen's Printer, 1966.

expenditures (investments) produced a substantial portion of Canada's economic growth (product per worker) in the half century ended in 1961 (p. 56), and, more importantly, because he attributed much of the per capita income difference between Canada and the United States to education investment differences (p. 57), his work became an important reference in rationales, for rising public expenditures for education, that were intended to appeal to enlightened national self-interest. It was about 1968, approximately the same time that public education expenditures in Canada passed 8% of the GNP and Canada began to be recognized frequently in international comparisons as being in first place among the developed nations as a spender on public education (as a percent of GNP),¹ that the popularity of this type of research and the related literature seems to have peaked.

Little in the way of research on the returns of education is being done today and little is written on the investment nature of education expenditures. Education expenditures appear to be of more interest to economists specializing in public finance than to economists concentrating on the economics of growth. Economic interest in education expenditures now pertains more to the trade-offs between increments of those expenditures and tax savings or between increments of education expenditure and increments of other public services, than to the relationships between education expenditure and economic growth.

It is not being claimed here that the results of economic research or the writings of economists determine education expenditure policy, nor that economists write to provide polemics for public expenditure policies. But it is being noted that when public expenditure for education was growing most rapidly, the related policy was in accord with the dominant themes in the literature of the economics of education. In the years during which policy has de-emphasized education expenditure there has been a corresponding de-emphasis in related economic literature. The politician or policy adviser who counsels increasing education expenditures today cannot find strong arguments for his case in the current economic literature.

¹See Unesco Statistical Yearbook, 1972, p. 512; or D. Munroe, The Organization and Administration of Education in Canada, Secretary of State, Education Support Branch, Ottawa, 1974.

The shifting concerns or new emphases in the study and analysis of education expenditures and the changed attitudes of persons proposing public policy for education have been apparent since 1974 at least. An interesting indication of the shifting emphases in policy studies can be found in two statements of the Ontario Economic Council. In the 1974-75 Annual Report of the Council it was pointed out that "(when) the Council was formed (1961) it was conceived principally as a body which would investigate and report on problems related to achieving a high level of industrial growth and employment for the Province. The primary emphasis was on economic development: indeed, there was some suggestion that the new body might be named the Ontario Productivity Council or the Ontario Economic Development Council" (p. 1). In a news release of October, 1973, the Chairman of the Council said: "Research on public expenditure, rather than economic development, will be the main priority of the Ontario Economic Council for the next few years... The program will focus on the size and growth of public expenditures... Particular emphasis will be placed on spending in the health, education, community and social service fields. These make up about two-thirds of the provincial budget" (Toronto Globe and Mail, October 11, 1974, p. B1).

A comparable indication of changing orientations of persons proposing public policy, and perhaps of popular opinion, is the Report of the Special Program Review (The Henderson Report) of 1975.¹ In dealing with the importance of controlling provincial spending in the form of grants to school boards (p. 214), it said that available data "suggest... that historically a much more expensive system has developed than is necessary (p. 215)."

The literature on education policy today indicates popular, political and academic concern for such issues as the distribution of education opportunities, the competitive claims on funds of education and other service areas, the place of education expenditures in total public expenditure and education/taxation relationship. The closest thing to a sustained interest in education as investment is some concern for manpower requirements, in particular "manpower bottlenecks" that

¹ Government of Ontario, The Report of the Special Program Review, November 1975.

inhibit the development of, or reduce the international competitive advantage of, a particular industry. But manpower concerns have very little to do with (or are very difficult to relate to) general education and its related expenditures.

In short there appears to be a tacit consensus among economists and other people concerned with education policy that in Canada, and in other industrialized nations with expensive, highly developed school systems, most of us are "over educated" in one important sense, i.e., most of us would probably do our jobs about as well or as poorly as we do whether or not we had a little more or a little less formal education.

Barring the unlikely resurgence of belief in the constancy of high returns (in the form of increasing productivity) accompanying increasing education expenditures, it is as unrealistic to expect a return of the propensity to increase expenditures on education that characterized the 1960's, as it would be to expect the return of the increasing enrolments of that decade. No factor in the economic environment is more important to education expenditure policy than the present academic, political and popular perception of the competition of education expenditures with other public expenditures.

For all of that, it is to be expected that in this rich society, which appears to be getting richer albeit much more slowly than in recent decades, we will maintain high levels of expenditures on education and we will increase those expenditures. Education is generally described as a "superior good", or one on which people can be expected to spend more as their incomes rise. This would suggest that education expenditures (in real dollars) per pupil will continue to increase. It does not necessarily imply that education expenditures will increase at the rate necessary to assure that total education expenditures will increase under conditions of declining enrolments. Even less does it imply that expenditures will grow at the rate of either gross provincial product or provincial revenues. It does imply, however, that we are likely to spend more on education if the economy is faring well than if

it is not, and that we will spend more on education if we have more to spend on everything. To this relationship we will return later in this chapter.

It is difficult to predict who will pay the costs of education services in the future. It is possible that the pattern of public and private expenditures for education may be quite different in years to come. It is more probable that there will continue to be marked changes in the provincial/municipal distribution of the costs of public education.

Schools and Taxes: Ways to Pay

School board revenues are derived from two sources, provincial transfer payments (grants) to the boards and local mill rates levied on real property for the boards by the municipalities. The provincial contributions are a large item in the provincial budget, \$1,970 million (estimate) for fiscal year 1978-79, or about 13.5% of total provincial expenditures.¹ This item increased by about 4.8% in current dollars over the corresponding figure in the 1977-78 budget. Depending upon the inflation index chosen, it corresponds to a 2 to 4% decrease in real dollars. Under the conditions of austerity that might be associated with the commitment to a balanced budget for the province and to a reduced claim by government on the total resources of the province,² it is likely that this expenditure will continue to decline in real dollars. The current dollar growth of this item by 4.8% in a budget growing by 7.0% indicates a decision in favour of other activities and programs competing with education for provincial revenues.

However, under conditions of declining enrolments approximating 2.0%, a reduction in real dollars of 4% does not necessarily constitute an increase upon local ratepayers in the burden of supporting the education programs of their boards, if the boards do not elect to increase spending per pupil in real dollars. For simplicity, let it be assumed that an "average" board loses 2% of its enrolment this year, was receiving

¹Ontario Budget 1978, pp. 11-12.

²Ibid, p. 10.

last year a per-pupil grant equal to 50% of per-pupil expenditures and was meeting 50% of expenditures from local ratepayers. Assume, too, that the real dollar per-pupil expenditures are the same as last year. Total expenditures then are 2% less than last year. If split evenly that would provide a 2% saving for both the school board and the province. But if this total reduction in expenditures is applied solely to the school board, it would equal 4% of the board's share of those expenditures. It would also equal 4% of the province's share of those expenditures if applied solely to the province. But in accord with the policy choices implied by the 1978 Budget, what could have been a 2% saving each for board and for province becomes a 4% saving for the province and no saving for the board. However, there is no increase in the tax burden borne by the ratepayers in that board's jurisdiction. It can only be said that they are making the same total effort, but for fewer children. Indeed, to the extent that new ratepayers have been added to the rolls, and to the extent that properties have appreciated, the burden borne by the ratepayers in the board is reduced.

It is unfortunate that rates must be collected in current dollars, and that a raise in the current dollar rates of 9%, corresponding to an assumed general inflation of 9%, requires a conscious decision on the part of the board to increase the tax requisitions on the municipalities accordingly. The political act is the same as it would be to impose the 9% increase if there had been no inflation.

To the degree that a board is unwilling or unable to increase revenues from taxes on real property at a rate comparable to inflation, it is demonstrating an oft-mentioned characteristic of this class of tax. The elasticity of revenue with respect to property taxes (the income elasticity) is low compared to income taxes or sales taxes. Revenue from it characteristically climbs at a rate significantly lower than incomes. This applies whether rising incomes reflect improvements in real income or only inflationary increases. (The converse also holds. Revenues from this tax do not decline rapidly during recessions or deflationary periods.)

It may well be that the crux of our present education finance problems is the inflexibility (i.e., the low income elasticity) of the property tax. It might also be claimed that the crux of these problems is inflation. Certainly boards cannot maintain a constant level of real dollar revenue from local sources under the condition of inflation if the yield from taxes on real estate does not increase at the rate of inflation. Further, it is not possible for the province to appropriate to itself harmlessly the savings associated with declining enrolments (assuming constant real dollar per-pupil expenditures) under conditions of inflation unless the yield from local taxes does increase at the rate of inflation.

That is tantamount to saying that the province can reduce provincial expenditures by the amount of the real savings associated with declining enrolments as soon as it successfully implements a thorough reform of property tax or as soon as it eliminates inflation. One is free to choose between this interesting pair of impossibles in explaining the difficulties of translating economies associated with declining enrolments into reduced provincial expenditures.

Under the present state of the real property tax system and the prevailing attitudes toward real property taxes, the province need not be very successful in imposing an increasing share of the costs of education on the municipalities and their ratepayers to exacerbate the problems of maintaining the level of the local contribution to the partnership of the province and the boards in financing public education.

Tables 1, 2, and 3 taken from R.M. Bird and N.E. Slack's paper, Property Tax Reform and Educational Finance in Ontario,¹ offer an overview of the issues pertaining to local finance and taxation.

From 1970-74, school board spending grew at an annual rate of 6% while education grants grew at 12% and school taxes at 2% (Bird and Slack, p. 11). By 1974, property taxes provided 38% of school board

¹R.M. Bird, N.E. Slack. Property Tax Reform and Educational Finance in Ontario, Working Paper No. 21, Commission on Declining School Enrolments in Ontario, 1978.

revenue, and school property taxes accounted for 44% of total property taxes, down from 54% and 59% respectively five years earlier.

As Table 1.1 shows, however, the situation has changed markedly in the last few years. In 1977 those figures were 43% and 47% respectively. As school board revenues increased by a little more than 50% from 1974 to 1977, provincial grants went from 58% to 54% of those revenues. "The increase in school taxes was especially sharp from 1975 to 1976 -- 25% (representing a 21% increase in mill rates for school purposes and a 4% growth in the tax base) or over twice the rate of growth of municipal taxes in 1976."¹

In the years since 1975 rising school taxes have reversed the earlier downward trend in the relative importance of property taxes (property taxes as a portion of household income). Table 1.2 shows that the average residential property taxes declined from 3.2% of household incomes in 1970 to 2.4% in 1974, then rose to 2.6% by 1977, while the school taxes component of residential property taxes declined from 1.6% of household incomes in 1970 to 1.1% in 1974 and then grew to 1.2% in 1977. The average household school tax bill, which was \$9 lower in 1974 than in 1970, rose from \$171 in 1974 to \$260 in 1977 with \$41 of the \$89 increase coming in 1976. To say the same thing in different terms, taxes for school purposes fell from 1970 to 1974, but were 44% higher in 1977 than in 1970. Nevertheless, both school taxes and total residential property taxes were substantially smaller portions of household income in 1977 than in 1970 (19% and 25% smaller respectively). For the years 1970 to 1977 the elasticity of property taxes with respect to household income was only 0.81. A 1% increase in that income was associated with a .81% increase in property taxes ($2.6 \div 3.2$).

Table 1.3 tells us several interesting things about the behaviour of the property taxes during a period of rising per capita incomes (rising in both real and inflated dollars). From 1969 to 1976, taxable assessed valuation fell sharply in relation to gross provincial product (i.e., by 22%). In real dollars there was also a fall in assessed

¹Ibid, p. 13.

TABLE 1.1

LOCAL GOVERNMENT REVENUES, ONTARIO, 1974-77
(millions of dollars)

	1974	1975	1976	1977 (Estimates)
MUNICIPALITIES				
LOCAL TAXATION	1,105	1,311	1,469	1,640
ONTARIO GRANTS	944	1,233	1,288	1,455
OTHER REVENUES	455	570	697	815
SUB-TOTAL	2,504	3,114	3,454	3,910
SCHOOL BOARDS				
LOCAL TAXATION	877	1,040	1,296	1,480
ONTARIO GRANTS	1,333	1,633	1,724	1,875
OTHER REVENUES	71	76	83	90
SUB-TOTAL	2,281	2,749	3,103	3,445
TOTAL LOCAL SECTOR				
LOCAL TAXATION	1,982	2,351	2,765	3,120
ONTARIO GRANTS	2,277	2,866	3,012	3,330
OTHER REVENUES	526	646	780	905
TOTAL	4,785	5,863	6,557	7,355

Note: Totals may not add due to rounding. Other Revenues includes provincial payments in lieu of taxes.

Source: Ministry of Treasury (1977), Local Government Finance in Ontario, 1975 and 1976, pp. 5, 10, & 14.

TABLE 1.2

AVERAGE RESIDENTIAL PROPERTY TAXES PER HOUSEHOLD, ONTARIO, 1970-77

	1970	1974	1975	1976	1977 ⁽¹⁾
	\$	\$	\$	\$	\$
MUNICIPAL TAXES AND CHARGES	181	212	244	263	284
SCHOOL TAXES	180	171	195	236	260
TOTAL PROPERTY TAXES	361	383	439	499	544
SHARE OF HOUSEHOLD INCOME	%	%	%	%	%
TOTAL PROPERTY TAXES	3.2	2.4	2.4	2.5	2.6
(School Taxes)	(1.6)	(1.1)	(1.1)	(1.2)	(1.2)

(1) Estimated

Source: Ministry of Treasury (1977), Local Government Finance in Ontario, 1975 and 1976, pp. 6 & 15.

TABLE 1.3

RELATIVE CHANGES IN ASSESSED VALUES AND PROPERTY TAXES, ONTARIO, 1969-76

	CURRENT DOLLARS		PERCENTAGE CHANGE	CONSTANT DOLLARS 1976		PERCENTAGE CHANGE
	1969	1976		1969	1976	
ASSESSED VALUATION (\$ millions)	16,320	30,118	85	28,270	30,118	7
AS PERCENT OF GPP	50.0	38.9	-22	50.0	38.9	-22
PER CAPITA (\$)	2,210	3,615	64	3,828	3,615	- 6
PROPERTY TAXES (\$ millions)	1,438	2,765	92	2,870	2,765	- 4
AS PERCENT OF GPP	4.4	3.6	-18	5.1	3.6	-29
AS PERCENT OF ASSESSED VALUATION	8.8	9.2	5	10.2	9.2	-10
PER CAPITA (\$)	195	332	70	389	332	-15
RESIDENTIAL AND FARM TAXES						
PER CAPITA (\$)	113	194	72	226	194	-14

Note: Assessed valuation figures are total taxable valuations. Property taxes include special charges and business taxes but exclude payments in lieu of taxes. Gross provincial product at market prices and assessed valuations are deflated by the national accounts implicit gross national expenditure index for government current expenditure on goods and services.

Source: Ontario Statistics 1976 - population, GPP; National Income and Expenditure Accounts - deflators; Ontario, Municipal Financial Information and Local Government in Ontario, 1975 and 1976 - assessed valuation and taxes.

valuation per capita (6%). It is not surprising, then, that the yield from the property tax fell rather sharply in real terms (by 4%) over the 1969 to 1976 period. What is surprising, in view of what is often perceived as mounting protests against property taxes, "is the fact that taxes also fell as a percent of assessed valuation; although the tax rate on the assessed valuation rose slightly from 8.8% in 1969 to 9.2% in 1976, the taxes collected in real terms -- in terms of what the government could buy with the money -- actually fell (from 10.2 to 9.2%)." ¹ Though property tax revenues in current dollars increased 92% from 1969 to 1976, they fell sharply in relation to GPP (29% in real dollars and 18% in current dollars). Property taxes per capita in real terms fell 15%, and the residential and farm taxes component of them fell 14%.

The economic -- or political -- fact of failure of the yield from property taxes to keep up with GPP or price changes is even more interesting when viewed against the progress of provincial tax revenues. The latter grew at an annual average rate of 15.5% 1972 to 1977, whereas the average increase in inflation (by the GNP price index) was only 10.4%. This annual increase of 5.1% in real terms was coincidental with an average increase in real GPP of 3.6%. ² Provincial taxation revenues are projected (in D. Foot, et al., The Ontario Economy 1977-87, Ontario Economic Council, 1977) to grow at 11.5% during 1977-82, while the GNP inflation rate increases at 6.3%. This 5.2% growth in projected real provincial tax revenues corresponds with projected average increases in real GPP of 5.4%. ³

There is an important point to make about the difficulties that the school boards, the taxing municipalities and the ratepayers perceive to have been associated with the increased portion of board expenditures being met from local taxes in very recent years. There has been no significant increase in the burden of these taxes or of total property

¹Ibid, p. 16.

²D.K. Foot, Resources and Constraints: Public Education and the Economic Environment in Ontario 1978-1987. Working Paper No. 1, Commission on Declining School Enrolments in Ontario, 1978, pp. 12-19.

³Ibid.

taxes if they are viewed as a proportion of provincial product, per capita income or household income. The difficulties have been those of maintaining or increasing the yield from a tax with low income elasticity.

Had the yield from the residential property taxes for education purposes been maintained at the same proportion of household income that it was in 1970 it would have been 33.3% higher in 1976 and 1977 than it was (Table 1.2). Had the yield from all property taxes (residential plus all other taxable properties) been held at a constant portion of GPP from 1969 to 1976, they would have been 22% higher in 1976 than they were (Table 1.3). Assuming that the 22% applies to both the school and municipality portion of the local tax bills (though, in fact, school taxes increased less rapidly than taxes for municipal purposes during this period), the effects of the reduced claim of property taxes on provincial product can be estimated as follows. In 1976 total board expenditures were \$3,103 million, of which the provincial grants were \$1,724 million or 55.6%.¹ Had the local portion, \$1,379 million, been 22% higher, it would have amounted to \$1,682 million, and the provincial share could have been reduced to \$1,421 million, or 45.8% of the total.

The reasons it has been difficult to maintain or increase yields from property taxes are probably numerous, but they do not include ability-to-pay, as that condition is related to the ratio of tax to income. The property tax has been criticized as inequitable, regressive and anachronistic. Clearly it is unpopular, even as taxes go. It can also be said that it has been in a process both of reform and de-emphasis since 1967 at least. The report of the Smith Committee (Ontario Committee on Taxation, 1967) is usually described as the beginning of this reform. It recommended, among other things, that the tax be de-emphasized, in particular by increasing provincial grants (for schools and for municipal purposes) to reduce its role in public finance. Policy for reform has, in fact, followed the recommendations of that committee, and it must be acknowledged that the declining role of the property tax in supporting education (until the last few years) has been in accord with provincial policy.

¹Ministry of Education, Education Statistics Ontario, 1977, p. 15.

The low income elasticity that has been described here simply as a characteristic of property taxes has often been mentioned as one of its weaknesses or failings. However, some people sometimes call that characteristic a "virtue" in a tax. Certainly the "automatic" increases in sales and income taxes that come with inflation are sometimes described as "faults" of those taxes. An inelastic tax forces frequent express political approvals of tax and expenditure increases. If it is thought that resorting more frequently to the political process for determining tax and expenditure levels gives a better approximation of the "optimum" level of taxes and expenditures, there is no "fault" to low income elasticity in a tax.

It seems reasonably clear that at this time in Ontario the government intends that the boards (and municipalities and ratepayers) shall play an increasing role in determining education expenditures, in particular in determining that point at which we will stop spending on education each year so that we have money to spend on other things. It seems almost as clear that the government wants some if not all the savings associated with declining enrolments to accrue to the provincial treasury. Both of these things require an important role, probably an increasing role, for property tax in financing education.

It is for this reason that, very early, this Commission addressed attention to the relationships between education finance and taxation reform. At this stage it seems appropriate to make this summary statement:

There are and will continue to be real savings resulting from declining enrolments, even assuming the maintenance of, or a gradual increase in, per-pupil expenditures. All or part of those savings can be realized in the form of reduced provincial expenditures, but the portion of those savings accruing to the province will depend upon our willingness to increase the local share in school finance. Declining enrolments make it possible to increase the role of local taxes in the finance of education without increasing the real burden of property taxes. However, the difficulties associated with increasing the role of local taxes in school finance will increase with the rate of inflation. In fact, continuing high rates of inflation will probably make increased dependence upon property taxes impossible unless there is marked progress in property tax reform. In particular, an increasing role of property tax in school finance requires reforms facilitating the more rapid response of taxable assessed valuation to changes in market values of real estate.

The Ontario Economy, the Provincial Budget and Publicly-Supported Schools

Whatever the adjustments this province chooses to make in the prevailing arrangements for apportioning the bill for public education, it is appropriate to assume that our propensity to spend on schools will be affected by general economic conditions. It will also be affected by the relative priorities assigned to education and the other expenditure categories in the provincial budgets (and, of course, to some extent in municipal budgets).

In the First Interim Report of this Commission much attention was paid to recent current and projected economic conditions, provincial revenues and provincial expenditures. Only some of the highlights of those economic actualities and projections will be recapitulated here. However, two points were made in the earlier report that should be re-emphasized.

The first point is that it is no simple matter to evaluate the present state of the economy. One may choose to emphasize the positive indicators of our economic condition. It is true, as it was at the beginning of the year, that Ontarians are producing more than ever before and a larger number and a larger percentage of them are employed than ever before. But it is also true that growth in gross provincial product in 1977 was woefully short of our "expected" or "normal" growth rate. It now appears that the growth rate will be modestly better, but still disappointing in 1978. Increases in product per capita and per worker have been very modest for several years and large numbers of expensively trained people are not finding work in the fields for which they have been prepared.

The second point is that education is, and has been throughout the 1970's, facing increasing competition from other expenditure categories in the provincial budget. The first of these effective competitors, and still the most impressive, is health. Health and education (all sectors and levels) have accounted for more than half the total budgetary expenditures since the beginning of the decade and, except for 1974-75, health has constituted a slightly larger claim in the provincial expenditure

estimates than has education. By comparison, health expenditures were, with an exception, well below half those for education through the 1960's (First Interim Report, p. 8).

The rapid increases in education expenditures (454%) that we associate with the 1960's corresponded to an increase in population of 20.8%, in GPP of 122% and provincial government expenditures of 296% (First Interim Report, p. 7). The 1960's were a time when Ontario could make the political decisions to spend a large portion of an increasing provincial product in the public sector, to spend a disproportionately large share of that portion on education and still afford satisfying increases in expenditures for other public services and in real personal disposable income (RPDI) per person (after-tax income in real dollars per person).

For the nation, RPDI per person, which had increased at an annual rate of 1.66% in the 1955-60 period, increased in the next five years at an average annual rate of 3.18% -- almost double -- and 3.20% in 1965-70.¹ Table 1.4 shows that the province was enjoying growth in RPDI/P in excess of that of the nation in the 1950's, but in the early 1960's the growth was less than the nation's. In the late 1960's in both Ontario and the nation RPDI per person grew at a rate in excess of 3.0%. By the early 1970's both nation and province had abnormally high rates of RPDI growth as a result of high rates of growth in GNP and GPP. A slowdown in population growth coupled with the high rates of RPDI growth resulted in extraordinarily high growth rates of RPDI per person.

Because of the high rates of RPDI per person in the early 1970's, the recession of 1974-75 and the uncertain recovery from it in 1976, 1977 and 1978 to date seem the more severe. Our expectations apparently are coloured not only by the improvements in our standard of living in the 1960's, but also by the intensification in that improvement in the early 1970's. The early 1970's were also the first years of the decline in enrolments. At that time we were unusually tolerant of increasing unit and total costs in the education industry and it may be said that

¹D.K. Foot, et al., The Ontario Economy, 1977-1987, Ontario Economic Council, 1977, p. 51.

PER CAPITA PERSONAL DISPOSABLE INCOME, ONTARIO, 1950-73

YEAR	POPULATION ¹	PERSONAL DISPOSABLE INCOME	PDI PER PERSON	CONSUMER PRICE INDEX ² (1961=100.0)	REAL PDI (1961 Dollars)	REAL PDI PER PERSON	GROWTH IN RPDI/P	AVERAGE ANNUAL GROWTH RPDI/P
	(millions)	(\$ billion)	(\$000)		(\$ billion)	(\$000)	(%)	(%)
1950	4.471	5.208	1.165	79.6	6.543	1.463	0	
1951	4.598	5.916	1.287	88.0	6.723	1.462	2.5	
1952	4.788	6.467	1.351	90.2	7.170	1.498	3.7	2.0
1953	4.941	6.860	1.388	89.4	7.673	1.553	-0.7	
1954	5.115	7.090	1.386	89.9	7.887	1.542	4.5	
1955	5.266	7.644	1.452	90.1	8.484	1.611	4.0	
1956	5.405	8.273	1.531	91.4	9.051	1.675	1.8	1.9
1957	5.636	9.066	1.609	94.3	9.614	1.706	1.3	
1958	5.821	9.745	1.674	96.8	10.067	1.729	0.6	
1959	5.969	10.167	1.703	97.9	10.385	1.740	0	
1960	6.111	10.529	1.723	99.1	10.625	1.739	-1.0	1.6
1961	6.236	-10.720	-1.719	100.0	10.720	1.719	4.4	
1962	6.351	11.533	1.816	101.2	11.396	1.794	2.9	
1963	6.481	12.320	1.901	103.0	11.961	1.885	2.1	
1964	6.631	13.106	1.976	104.8	12.506	1.886	4.1	
1965	6.788	14.301	2.107	107.4	13.316	1.962	4.2	
1966	6.961	15.850	2.277	111.4	14.228	2.044	2.5	3.5
1967	7.127	17.233	2.418	115.4	14.933	2.095	3.2	
1968	7.262	18.855	2.596	120.1	15.699	2.162	3.3	
1969	7.385	20.696	2.802	125.5	16.491	2.233	1.7	
1970	7.551	22.189	2.946	129.7	17.108	2.271	3.8	4.0
1971	7.703	24.465	3.144	133.4	18.340	2.357	4.4	
1972	7.824	27.687	3.441	139.8	19.805	2.461	6.0	
1973	7.939	31.189	3.927	150.5	20.724	2.609		

¹At June 1.²All items for all Canada.

Source: Ontario Statistical Review, (1976).

the first responses to the new conditions were, in a sense, no response at all. That lack of response was certainly not caused by changes in RPDI per person, which kept rising.

Tables 1.5 and 1.6 offer some past and projected indicators of our economic environment that may be of particular relevance to our present and future propensity to condone increasing taxes and rapid growth in a particular expenditure category.

Average growth in real GPP in the good years 1967-72 was markedly higher than that experienced in the recession plagued 1972-77 quinquennium, but average growth in real GPP is projected to grow at 5.4% during 1977-82 and 4.4% during 1982-87. This corresponds to seemingly very high increases in RPDI per person throughout the 1967-77 decade, and to rates of growth in this variable during the 1977-82 and 1982-87 period that compare favourably with our performance in the 1960-65 and 1965-70 periods.

However, this growth in disposable income per person is in large part due to estimated rates of employment growing faster than the population. In effect, a larger portion of the population will have to be employed to achieve these rates of growth in per person disposable income. (The difficulties implied in Table 1.5 of increasing productivity are buttressed by the most recent data on productivity and employment. As reported in the Financial Post, October 7, 1978, Canadian GNP in constant (1971) dollars was 3.7% higher at the end of the second quarter, 1978, than at the end of the same quarter in 1977; the Financial Post of August 5, 1978, reported the number of employed Canadians was 3.4% higher in June, 1978, than in June, 1977. The suggestion here is of increased product per employed person of almost zero for the year.) It should also be noted that the projected RPDI per person and per employed person over the coming decade, presented in Table 1.5, are dependent upon assumptions of increasing provincial deficits, policy commitments to balanced budgets notwithstanding.

TABLE 1.5

THE PROVINCIAL ECONOMIC ENVIRONMENT, 1967-87
(Percent Average Annual Growth Rate)

	HISTORY		PROJECTION	
	1967-72	1972-77*	1977-82	1982-87
REAL GROSS PROVINCIAL PRODUCT**	6.1	3.6	5.4	4.4
POPULATION	1.9	1.6	1.4	1.4
GROSS IMMIGRATION (thousands)	78	94	75	75
LABOUR FORCE	3.6	3.5	2.2	2.0
EMPLOYMENT	3.2	3.0	2.4	2.1
UNEMPLOYMENT	4.2	5.5	6.5	5.3
REAL PERSONAL DISPOSABLE INCOME PER PERSON	4.2	4.0	3.3	3.3
REAL PERSONAL DISPOSABLE INCOME PER EMPLOYED PERSON	2.8	2.6	2.3	2.5
GOVERNMENT (Ontario) SURPLUS OR DEFICIT (\$ billion)	-0.21	-1.25	-2.94	-8.35

* Estimates used where necessary

** Deflated by the GNP deflator.

Source: Institute for Policy Analysis.

TABLE 1.6

PROVINCIAL GOVERNMENT EXPENDITURES, 1972-87
(Percent Average Annual Growth Rate)

EXPENDITURE CATEGORY (in current dollars)	HISTORY*	PROJECTION	
	1972-77	1977-82	1982-87
HEALTH	22.6	13.1	14.0
EDUCATION	11.7	11.3	10.5
TREASURY, etc.	14.9	12.4**	12.5**
TRANSPORTATION & COMMUNICATIONS	11.3	14.5	13.6
COMMUNITY & SOCIAL SERVICES	23.4	11.0	12.5
PUBLIC DEBT INTEREST	11.9	12.8	13.8
OTHER	14.3	12.3	12.0
TOTAL EXPENDITURES	15.7	12.4	12.5
INFLATION IN GNP	10.4	6.3	6.8
INFLATION IN "ALL GOVERNMENT"	12.4	7.4	8.1

* Historic growth rates should be interpreted with caution, even though every attempt has been made to ensure that the categories are consistently defined.

** Calculated at the average growth rate.

Source: Institute for Policy Analysis.

Table 1.6 shows that the projected growth of RPD I per person and per employed person are dependent upon further assumptions (in the form of other sets of projections): (i) growth in total provincial expenditures of 12.4% in 1977-82 and 12.5% in 1982-87, compared with 15.7% in 1972-77 and (ii) a pattern of government expenditures that will create reductions in the rate of growth of all major expenditure categories except transportation and communications and public debt interest. The projected modest increases in RPD I per person and per employed person are associated with projected reductions in the rates of growth of expenditures for most publicly provided services.

Of most interest to persons responsible for funding the schools of this province are projections of the propensity of the government to translate revenues into transfer payments to the boards. A set of such projections has been made by Dr. David Foot of the Institute for Policy Analysis, University of Toronto. He is here venturing into one of the more dangerous areas of economic forecasting; he is in effect predicting the behaviour of the politicians who make education expenditure policy. This, and the strong reactions sometimes evoked by his projections of negative growth in these transfers, suggest that they should be presented in their original context.

Since 1973 provincial payments to local governments and agencies have been governed by the "Edmonton Commitment". Essentially this Commitment has guaranteed that provincial transfers to local governments and agencies would grow at the same rate as provincial budgetary revenues. The base year was chosen to be fiscal 1973-74. According to the Provincial Treasurer, the province has transferred almost \$13.7 billion out of budgetary revenues of \$46.2 billion (or 29.6 percent) over the past five years. Other assistance which includes payments in lieu of taxes, tax compensation grants, employment incentive payments and payments into the Teachers' Superannuation Fund, has brought the level of total Ontario payments to local governments and agencies to \$15.4 billion since 1973. The average annual growth of these transfers has been in excess of 14 percent, although the rate of increase has declined rapidly since the peak year of 1975-76.

These total provincial transfers to local governments and agencies over the past five years have been distributed as follows:

	Percent
Education	50.3
Transportation	12.9
Social Assistance	5.0
Other Conditional	<u>2.6</u>
Total Conditional	70.7
Total Unconditional	10.7
Payments to Agencies	7.4
Other Assistance (of which Teachers' Superannuation Fund is 8.4)	<u>11.2</u>
Total	100.0

Conditional payments have accounted for slightly over 70 percent of total transfers and by far the largest component of these are transfers to school boards which, by themselves, have accounted for over half of total transfers. The average annual growth of these payments has been roughly half that of "all other transfers" (9.7 percent compared to 20.7 percent -- averaging 14.4 percent). The pattern of growth has been somewhat similar with the exception of the current year when the growth in educational transfers is expected to increase to 10.9 percent while the growth in "all other transfers" is estimated to decrease to only 0.4 percent. Finally, it should be noted, that "other assistance" also includes an education related component, namely payments into the Teachers' Superannuation Fund. These payments have totalled \$1.296 billion over the past five years (or 8.4 percent of total transfers over the period). The growth in these payments is dictated by the actuarial requirements of the fund which, in turn, are influenced by teacher salary awards. Not surprisingly, therefore, there was a large increase (of \$100 million or over 42 percent) in these payments in 1976-77. The estimated payments into this fund for fiscal 1978-79 amount to \$262 million.

The short-term outlook which underlies the commitments for fiscal year 1978-79 has been recently outlined by the Provincial Treasurer (in a speech to the Provincial-Municipal Liaison Committee on September 16, 1977). The speech contained proposed "amendments" to the Edmonton Commitment by, basically, broadening the base on which assistance is to be assessed. The major new inclusion (accounting for roughly 70 percent of the new items) is payments into the Teachers' Superannuation Fund. By including these new items under the Commitment, the Treasurer has been able to scale down provincial payments to local governments for 1978-79, from a projected \$3.748 billion under the previous formula to \$3.713 billion under the "broadened" formula, or a difference of \$35 million. The new projection represents zero growth from the previous year under the "broadened" formula and an actual decrease in total transfers when compared to the previous formula. At the same time, the Provincial

Treasurer announced a provincial commitment of a total of \$4.023 billion (or an increase of 8 percent) in transfers for 1979-80 on the basis of achieving balance under the "Broadened Edmonton Commitment."

These proposals contain the following implications for assistance to school boards and local governments and agencies in the province:

	----- 1977-78	\$ billion 1978-79	----- Increase	Percent Increase
<u>Assistance to School Boards</u>				
General Legislative Grants	1.880	1.970	0.090	4.8
Teacher's Superannuation	<u>0.262</u>	<u>0.331</u>	<u>0.069</u>	<u>26.3</u>
Total	2.142	2.301	0.159	7.4
<u>Assistance to Municipalities and Local Agencies</u>				
	<u>1.571</u>	<u>1.722</u>	<u>0.151</u>	<u>9.6</u>
Total Transfers	3.713	4.023	0.310	8.3

Consequently, the short-term outlook for the education sector in the province is for 10.9 percent growth in legislative grants (or a 5.4 percent growth in total assistance to school boards including superannuation payments) in 1977-78 and a 4.8 percent growth in legislative grants (or a 7.4 percent growth in total assistance) in 1978-79. Given the inflation projections outlined in section 2 above, these grant payments represent a real increase of approximately 3 to 4 percent in 1977-78 and a real decrease of approximately 2 to 3 percent in 1978-79.

The medium-term outlook is even less promising. As noted above* education expenditures are projected to average in excess of 20 percent (a real increase of approximately 3 to 4 percent) over the next decade. However this total includes post-secondary education expenditures, expenditures on special and cultural education, Ministry administration expenditures and contributions to superannuation funds, as well as grants to school boards. The growth in the latter category, which reflects amongst other things the projected declining ratio of school-age children in the provincial population, is projected to grow only slightly until approximately 1981, after which a decline is projected (until 1986). More specifically, the medium-term outlook for school board assistance (excluding superannuation payments) can be summarized as follows:

* Table 1.18 of the First Interim Report, Commission on Declining School Enrolments in Ontario, 1978.

	Percent Average Annual Growth Rate	
	1977-82**	1982-87**
General Grants to School Boards	2.2	-0.1
Rate of Inflation in Government	7.4	8.1
'Real' Change (approx.)	-5.2	-8.2

**1977 refers to fiscal year 1977-78, etc.

Consequently, over the next decade these projections suggest that school boards in Ontario should be planning for negative 'real' growth in their receipts from the provincial government. (pp. 23-28).¹

Dr. Foot's projections of what the real-dollar level of transfers to the boards will be are not being endorsed here. In any case, they are predictions dependent upon specific contingencies and offered with important qualifiers. But Dr. Foot's projections are in conformity with recent trends in our public-expenditure behaviour and in our economic development. Short of saying what the level of these provincial-board transfer payments (grants) will be, or of even predicting that these grants in real dollars will be positive or negative, the Commission offers this summary statement about the evolution of the provincial-school board financial partnership:

It appears that in the decade to come, the province will experience formidable pressures to reduce the portion of provincial revenues going to the school system. This will be the motivation to increase the dependence of the boards upon the taxpayers in the municipalities they serve. Declining enrolments are the salient fact in the social environment that will make it possible to do this without necessarily reducing the resources per pupil or increasing the burden of property taxes.

¹D.K. Foot, Resources and Constraints: Public Education and the Economic Environment in Ontario, 1978-1987, Working Paper No. 1, Commission on Declining School Enrolments in Ontario, 1978.

Chapter 2

Demographic Variables and Live Birth Patterns To 2001

Politicians who make public education policy, the administrators who manage school systems, teachers, parents and taxpayers should be made aware of this historic generalization: children are a diminishing portion of the population in the urbanizing, industrial societies of the Western world and have been for several generations now.

Considering its ultimate consequences, this truism will not always hold. Certainly it has not always applied to the societies and cultures of this part of the world. But it corresponds to a fact of life of the 19th and 20th centuries in the societies most closely associated with what we were taught in school to call the industrial revolution.

A qualifier must be added immediately. Historic generalities are of limited utility when the business at hand is making decisions for schools to serve the populations of children we presently have or will have for the foreseeable future. Table 2.1 and Chart 2.1 demonstrate both the applicability of the generality to Canadian society and its limited utility in guiding school policy.

Table 2.1 shows that, for Canada, children under 5 years of age were 18.51% of the total population in 1851. That percentage reduced in a rather orderly progression to 9.14 in 1941. The percentage grew to 12.37 in 1961, then fell to 7.53 in 1976. In Ontario children under 5 were 13.08% of the population in 1881 and 7.87% in 1941. They grew to 11.87% of the population in 1961 and were 7.35% in 1976. In both Canada and Ontario, the pattern of development of the ratio of children under 10 was similar.

In Chart 2.1 we see that a "long-run view" of the diminishing proportion of children to total population can be approximated by a straight line, in both the Canada and Ontario cases. The "short-run view" depicts the dramatic behaviour of the children to total population ratio since 1941. It is obvious that an appreciation of the historic

TABLE 2.1

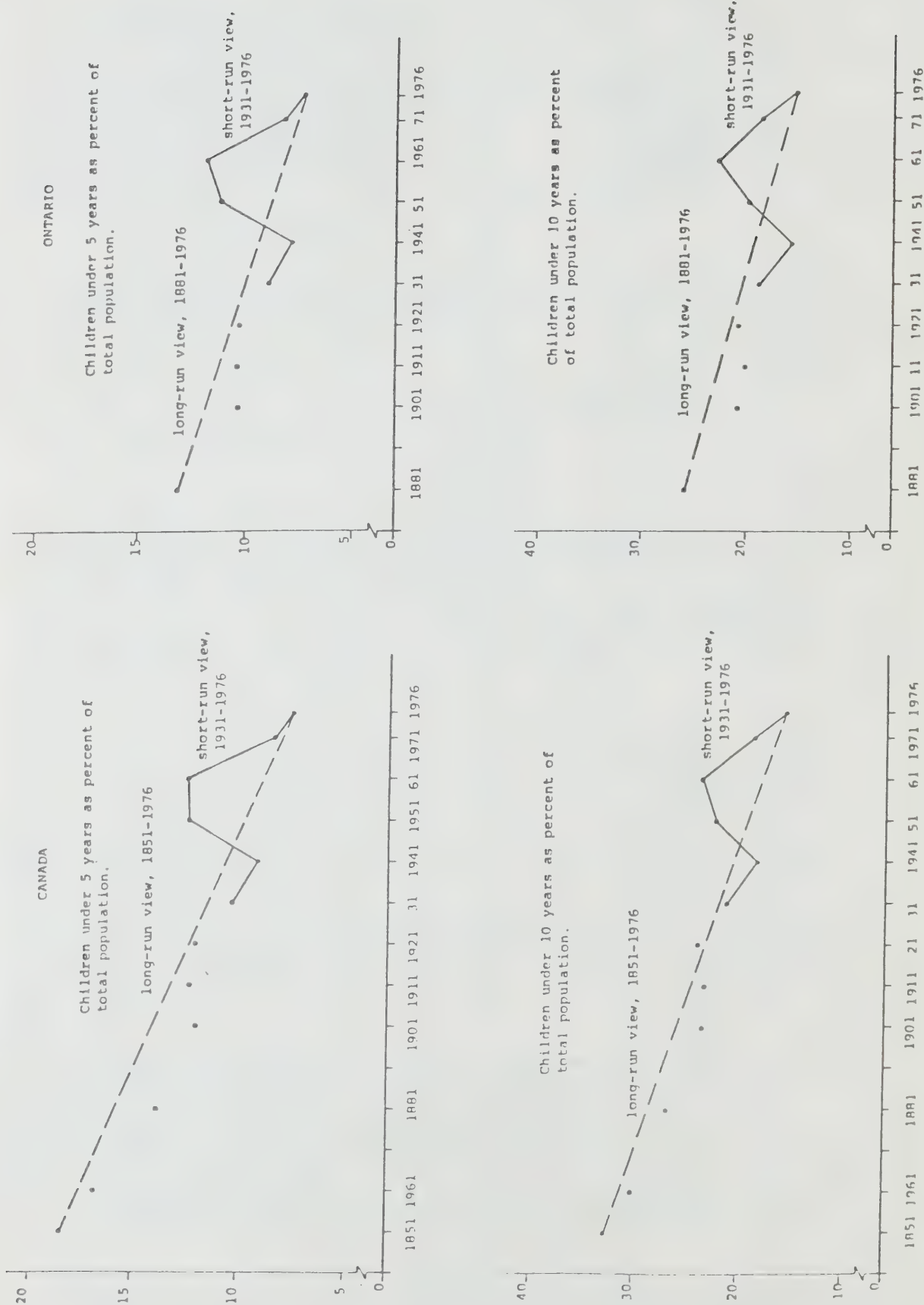
CHILDREN UNDER 5 AND CHILDREN UNDER 10 AS A PERCENTAGE OF TOTAL POPULATION

C A N A D A						O N T A R I O					
YEAR	TOTAL POPULATION	CHILDREN UNDER 5 (0-4)	%	CHILDREN UNDER 10 (0-9)	%	YEAR	TOTAL POPULATION	CHILDREN UNDER 5 (0-4)	%	CHILDREN UNDER 10 (0-9)	%
1851	2,436,000	451,000	18.51	797,000	32.72	1871	1,620,851				
1861	3,230,000	543,000	16.81	972,000	30.09	1881	1,926,922	252,053	13.08	497,486	25.82
1871	3,689,257					1891	2,114,321				
1881	4,325,000	599,000	13.85	1,161,000	26.84	1901	2,182,947	224,814	10.30	455,382	20.86
1891	4,833,239					1911	2,527,292	263,266	10.42	507,431	20.08
1901	5,371,000	646,000	12.03	1,264,000	23.53	1921	2,933,662	301,809	10.29	609,670	20.78
1911	7,207,000	890,000	12.35	1,675,000	23.24	1931	3,431,683	307,711	8.97	640,699	18.67
1921	8,788,000	1,059,000	12.05	2,109,000	24.00	1941	3,787,655	297,924	7.87	599,439	15.83
1931	10,377,000	1,075,000	10.36	2,208,000	21.28	1951	4,597,542	514,722	11.20	914,014	19.88
1941	11,507,000	1,052,000	9.14	2,098,000	18.23	1961	6,236,092	740,193	11.87	1,414,712	22.69
1951	14,009,000	1,722,000	12.29	3,120,000	22.27	1971	7,703,105	637,255	8.27	1,420,770	18.44
1961	18,238,247	2,256,401	12.37	4,335,923	23.77	1976	8,264,465	607,205	7.35	1,275,020	15.43
1971	21,568,310	1,816,155	8.42	4,070,160	18.87						
1976	22,992,600	1,731,995	7.53	3,619,800	15.74						

Source: M. C. Urquhart, Editor, Historical Statistics of Canada. Toronto: MacMillan of Canada, 1965, p. 16.
 Census of Canada, 1971, Volume 1, part 2.
 Census of Canada, 1941, Volume 3.
 Unpublished Statistics Canada data for 1976.

CHART 2.1

ALTERNATIVE VIEWS¹ OF DECLINING RATIO OF CHILDREN TO TOTAL POPULATION



¹Line representing long-run view is simply a straight line joining 1976 percentage to percentage in 1851 (for Canada) or to percentage in 1881 (for Ontario); it is not a "least squares line."

behaviour of this demographic index would not have done much to improve policy-makers' and administrators' abilities to deal with the challenge of accommodating the large cohorts moving through the schools in recent decades. It is also true that demographic data on the province, though of importance to provincial policy makers and public servants, is of limited utility to local policy-makers and administrators. One other point should be made: it was only in the 1971 census that the diminishing rates first corresponded to a decrease in numbers of children.

Policy-makers and administrators know that their first task is to deal with current problems and to anticipate some of those that will appear a few years ahead. Grand historic insights are of use mainly for the bases they may offer for projecting conditions in the years just ahead and for predicting problems. For the provision of public services, education included, foreknowledge must be quite specific about time and place to be of any value. So far as education is concerned, the demographic knowledge most obviously needed for a decade ahead (quite a distant horizon for policy planning) is numbers and locations of children born over the previous six years and projected numbers of children to be born in each of the following six years, along with some information on their distribution. If we are to extend the horizon of policy planning detailed projections of the numbers and distributions of births over a longer period is needed.

The projections of Ontario births presented below are offered as basic data on our society, as information on the environment of education policy making and as the origin of the phenomenon that is declining enrolments. It is intended that they be used to push the horizon of education planning into the next century.

Live Births to 2001

Only a small portion of the information presented on the components and structure of the population of Ontario in Chapter 1, and on school enrolments in Chapter 3 of the First Interim Report will be repeated in this Final Report. It should be emphasized, however, that the purpose in elaborating upon the population and enrolment facts and projections

in both the First and Second Interim Report was to substantiate the claim of this Commission that projections of births then being used by most planners, many academic demographers and virtually all education officials and spokesmen were too high. That purpose still holds and motivates a return in this Final Report to that important population variable that is births, even though the relatively low projections offered by the Commission are much more widely accepted now than they were even eight months ago.

Evidence in support of reducing the estimates of current fertility rates and the projections of future fertility rates and births continues to mount. Some of the most recent data related to projections of births are incorporated in the projections presented here. For more detailed information on the past, present and future of the Ontario population related to present and future enrolments, the reader is directed to the First and Second Interim Reports.

The Commission now has three sets of projections on births, school populations and/or enrolments in the province. One set of projected live births and enrolments was released by Statistics Canada in July. Another set, of enrolment projections only, was done by the Ministry of Treasury, Economics and Intergovernmental Affairs (Ontario) and was made available in final form to the Commission in June. The third set was produced by this Commission. The three sets each contain multiple projections using different assumptions about fertility (in the case of the two containing projections of births) and about net migration. They are presented in this and the following chapter.

Projected Live Births

Table 2.2 gives the number of live births for Ontario in the most recent projections prepared by Statistics Canada, for the period 1976-77 to 2001-2002, using the "census" definition of a year, e.g., June 1, 1976, to May 31, 1977. The set of assumptions used for each projection is reported in the footnote to the table. The four projections are based on combinations of two levels of fertility (family size moving

TABLE 2.2
PROVINCE OF ONTARIO,
ACTUAL AND PROJECTED LIVE BIRTHS TO 2001

CALENDAR YEAR JANUARY TO DECEMBER	ACTUAL BIRTHS	YEAR (CENSUS DATES) JUNE 1 TO MAY 31	PROJECTED BIRTHS (STATISTICS CANADA)			
			PROJECTION*			
			1	2	3	4
1975	125,775	1976-77	130,000	129,700	126,700	126,400
		1977-78	134,000	133,200	128,100	127,400
1976	124,700	1978-79	138,200	136,700	129,700	128,600
1977	122,758	1979-80	142,200	139,800	131,200	129,600
		1980-81	146,300	142,900	132,800	130,700
		1981-82	150,100	145,500	134,700	132,000
		1982-83	154,000	148,200	136,500	133,300
		1983-84	157,800	150,800	138,000	134,300
		1984-85	161,600	153,300	138,900	134,800
		1985-86	164,400	154,900	139,500	134,900
		1986-87	166,600	155,800	139,100	134,100
		1987-88	168,400	156,500	138,200	132,900
		1988-89	169,600	156,600	137,400	131,700
		1989-90	170,500	156,500	136,300	130,400
		1990-91	170,500	155,600	134,800	128,600
		1991-92	169,800	154,100	133,600	127,100
		1992-93	168,400	152,100	132,200	125,400
		1993-94	167,000	150,100	130,700	123,700
		1994-95	165,600	148,200	129,300	122,000
		1995-96	164,500	146,500	128,000	120,500
		1996-97	163,700	145,100	126,900	119,100
		1997-98	163,300	144,100	125,900	117,900
		1998-99	163,300	143,500	125,300	117,000
		1999-2000	163,800	143,300	124,800	116,300
		2000-2001	164,800	143,600	124,700	115,900
		2001-2002	166,200	144,200	124,800	115,700

**Registrar General

*Assumptions:

- Projection 1: Family, 1.8 children to 2.0 by 1991;
Net migration 57,500 up to 71,900.
Projection 2: Family, 1.8 children to 2.0 by 1991;
Net migration 32,300 down to 18,600.
Projection 3: Family, 1.8 children to 1.6 by 1991;
Net migration 40,500 up to 48,000.
Projection 4: Family, 1.8 children to 1.6 by 1991;
Net migration 23,500 up to 25,200.

Source: Statistics Canada, and Canadian Teachers' Federation,
The Class of 2001; Ottawa 1978.

from 1.8 children to 2.0 by 1991 and from 1.8 children to 1.6 by 1991)* and four very different levels of net migration. In the upper left corner of the main table the actual numbers of live births reported by the Registrar-General for Ontario for the calendar years (i.e., January 1 to December 31) 1975, 1976, and 1977 have been added. A comparison of the actual births with the projected births over the first two years of the projections (though the years in the two cases are not perfectly congruent) indicates discrepancies. All the projected values are too high. The assumptions used clearly do not correspond to the continued (and larger than anticipated) decline in actual live births in 1976 and 1977. Serious doubts may be entertained about projections 1 and 2, and the values for projections 3 and 4 should probably be adjusted downwards by 3% to 5%.** The projections of enrolment based on these models will also need adjustment.

Even with these criticisms and qualifiers the patterns of growth in the numbers of live births as shown in Chart 2.2 are most interesting and instructive. Projection 1 shows the quite startling results of a combination of assumed high fertility and high net migration. Projection 2 assumes lower net migration and registers the effects largely of an assumed high level of fertility. In both projections a very loud Echo of the Baby Boom is anticipated. Even with the lower levels of fertility used in projections 3 and 4, the echo is heard. In all four projections, birth rates rise enough in the late 1970's and through a part of the 1980's to bring about some increases in enrolments before the end of the century and before the trends of enrolment resume their downward course.

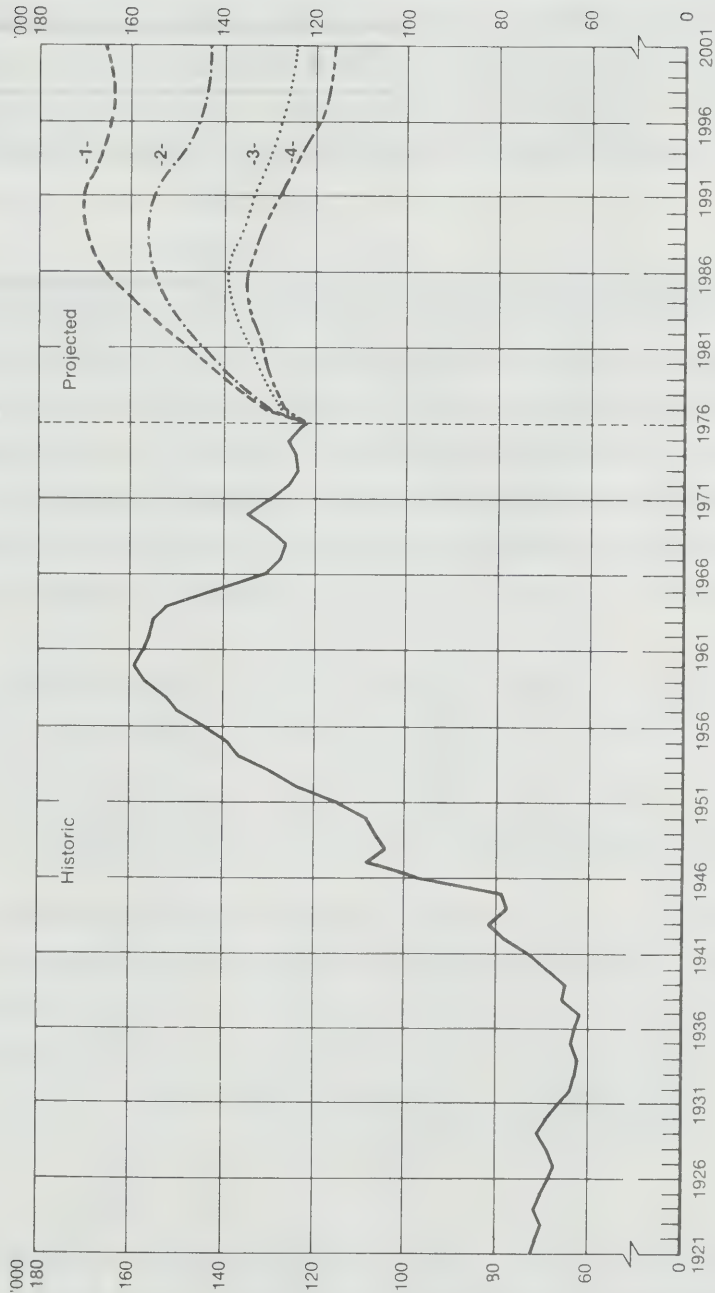
Table 2.3 gives the number of live births projected to the end of this century for each of the nine projections prepared by this Commission. Three levels of fertility and three levels of net migration have been used. The three levels-of-fertility assumptions in terms of size

* In another report from Statistics Canada, however, a family size of 1.5 children was used.

** Births have continued to decline during the first seven months of 1978, so even these adjustments may not entirely compensate for probable excesses in these projections.

CHART 2.2

LIVE BIRTHS, 1921 TO 1976, AND PROJECTED TO 2001, PROJECTIONS 1, 2, 3 AND 4



Source: Statistics Canada, and Canadian Teachers' Federation,
The Class of 2001; Ottawa 1978.

TABLE 2.3
 PROVINCE OF ONTARIO,
 PROJECTED LIVE BIRTHS TO 2001

(From The Commission on Declining School Enrolments in Ontario Projections)

YEAR	PROJECTIONS *								
	1	2	3	4	5	6	7	8	9
	HIGH FERTILITY 1.75			MEDIUM FERTILITY 1.6			LOW FERTILITY 1.5		
	ZERO	25,000	50,000	ZERO	25,000	50,000	ZERO	25,000	50,000
1976 } ACTUAL	124,647								
1977 }	122,476								
1978	125,991	128,320	128,368	123,831	123,952	124,000	123,111	123,500	123,560
1979	127,941	131,333	131,424	123,554	124,812	124,900	122,092	123,400	123,530
1980	129,703	134,076	134,220	123,032	125,464	125,600	120,809	123,310	123,480
1981	131,240	136,505	136,715	122,991	125,699	126,250	118,491	123,244	123,680
1982	132,490	138,549	138,838	122,648	126,053	126,900	116,591	121,924	122,177
1983	133,381	140,138	140,516	121,949	127,033	127,300	114,327	120,118	120,442
1984	133,844	141,202	141,781	122,372	127,455	127,800	114,724	121,031	121,526
1985	133,849	141,721	142,603	122,376	127,571	128,100	114,728	121,475	122,231
1986	133,423	141,729	143,018	121,987	127,600	128,350	114,363	121,482	122,587
1987	132,614	141,337	143,083	121,247	127,700	128,500	113,669	121,146	122,642
1988	131,441	140,581	142,826	120,174	127,196	128,450	112,663	120,498	122,422
1989	129,927	139,490	142,277	118,790	126,866	128,300	111,366	119,563	121,952
1990	128,108	138,101	141,470	117,127	126,264	127,900	109,806	118,372	121,260
1991	126,042	136,468	140,400	115,239	124,771	127,400	108,036	116,973	120,343
1992	123,797	134,644	139,118	113,186	123,103	126,100	106,112	115,409	119,244
1993	121,454	132,699	137,692	111,043	121,324	124,800	104,102	113,741	118,021
1994	119,097	130,708	136,202	108,882	119,498	123,500	102,075	112,027	116,736
1995	116,812	128,756	134,732	106,769	117,689	122,000	100,087	110,324	115,446
1996	114,674	126,922	133,365	104,757	115,953	120,800	98,181	108,678	114,200
1997	112,748	125,277	132,176	102,887	114,337	119,600	96,390	107,123	113,036
1998	111,085	123,878	131,224	101,190	112,876	118,400	94,728	105,680	111,976
1999	109,717	122,766	130,552	99,684	111,596	117,600	93,201	104,360	111,033
2000	108,659	121,964	130,183	98,377	110,510	116,900	91,806	103,166	110,209
2001	107,908	121,476	130,120	97,268	109,624	116,500	90,544	102,103	109,509

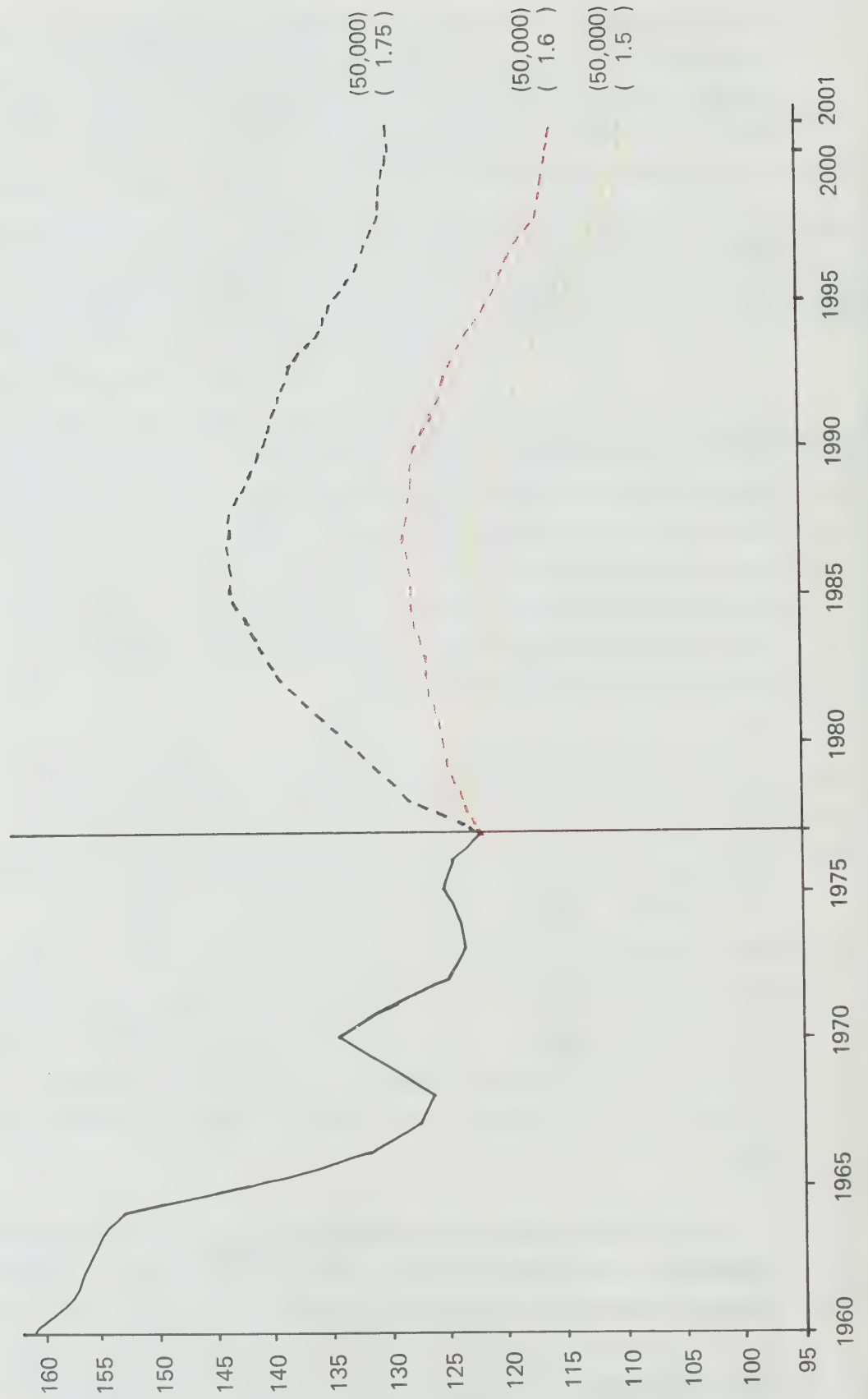
* For assumptions, see explanation in text, Chapter 2, p. 36.

of family are: 1.75 children from 1975 to the end of the century; a decrease from 1.75 to 1.6 children by 1983, and that rate to 2001; and a decrease to 1.5 children by 1983 and that rate to 2001. For net migration, per annum, the three assumed levels are: a decrease from 46,000 at present to 35,000 by 1983, then a steady increase to 50,000 by 1990 and that rate to 2001; a decrease from the present 46,000 to 25,000 by 1986 and that rate to 2001; and zero net migration, i.e., an immediate end to positive net migration and no resumption in this century. As in the case of the Statistics Canada projections, the differences between the combinations of high fertility and high net migration, and of low fertility and zero migration, are large. Again the projected births in 1978 (except possibly for the case of zero net migration) seem unrealistically high, especially when we know that the birth registrations in Ontario for the first seven months of 1978 were below those for the corresponding period in 1977. The substantial declines in live births which occur when zero migration is assumed suggest that birth rates -- and then school enrolments -- are affected by migration to a greater extent than is usually supposed.

As an aid to the reader in interpreting these live birth projections, the values from Table 2.2 have been shown in Chart 2.2, and those from Table 2.3 in Chart 2.3. In both cases the historic series have been added. The smooth curves of the projected values, by the way, arise from the formulae used in the model; in actuality the changes in birth rates do not conform so precisely to any curve. In all the trend lines there is evidence of the earlier Baby Boom, i.e., again an echo (soft or loud) appears. Even more significant is the consistent appearance of still further declines towards the end of this century. This latter phenomenon is, of course, a reflection or echo of the Baby Bust after 1960.

Many students of social change find the physical and cultural determinants of fertility rates and birth rates more interesting than the rates themselves. Certainly there are few more interesting topics in the literature of social inquiry. But we know very little about the social phenomena of changing rates of human reproduction.

CHART 2.3
ACTUAL AND PROJECTED LIVE BIRTHS IN ONTARIO, 1960 TO 2001



Source: The Commission on Declining School Enrolments in Ontario.

In the course of the Commission's activities many observations were made to us to the effect that birth rates will go up again with the return of "more prosperous times". But such economic explanations for our present low rate do not account for the persistent decline in fertility and birth rates through the economically ebullient years before 1973.

It has also been said that housing costs and housing shortages cause low birth rates. But birth rates were high during the first 15 years of the post-World War II epoch and have fallen since, though standards of housing by most measures have generally improved throughout the whole period. That explanation also raises an interesting question about the direction of any causal relationships between housing costs and birth rates, since the increase in numbers of employed persons per household that is so closely associated with declining birthrates has apparently contributed to the inflation of housing costs.

The appearance and increased availability of physical, pharmaceutical and surgical birth preventatives may explain a part of the decline in births, in particular the timing of and rate of the sharp decline since 1961. On the other hand this may explain very little, since birthrates had peaked and begun their decline before the general availability of the pill, abortions and vasectomies. And again the question of the direction of any causal relationship arises. Is the availability of techniques, devices and procedures a response to increased demand for them, or does the increased supply account for increased consumption? The same question can be asked about the related knowledge of or familiarity with the means to birth prevention.

In any case, the socio-cultural determinants of fertility and birth rates are not aspects of the environment with immediate implications for school policy. It is births themselves, recent and future births, that are the immediate determinants of the future demand for school services.

The projections of births in Ontario prepared by this Commission are lower than most such projections. The projections that the Commission considered most seriously in making enrolment projections are

those based on net migration approximating 50,000 by the end of the century and fertility rates declining to 1.6 before the end of the century. These include projection 3 from Table 2.2 (Statistics Canada's projections), although I believe these values are too high, and projection 6 from Table 2.3 (Commission's own projections). Finally, of these, projection 6 in Table 2.3, the lower of the two, is recommended as most likely to approximate closely the behaviour of this demographic variable that is such an important aspect of the environment for school policy making and planning.

However, at the time this report is being prepared for printing, it is necessary to add a qualifier. In light of the continuing decline in the number of births through mid-1978, the figures in projection 9, Table 2.3, which are considerably lower than those in projection 6, Table 2.3, may soon appear to be the "most probable" estimation of future births. I expect there will be a marked change in the trend of live births in the next two years, but if there is not I would propose that projection 9 be identified as the better approximation of future births. In that event, there will have appeared almost no Echo of the Baby Boom that has been predicted so often and so forcefully by so many observers of the demographic scene. The expected new "peak" on the graph of births will, at most, be a "plateau" lasting for about five or six years, followed by a continuing, steady negative slope.

Chapter 3

Projections of School-Age Populations and Enrolments

Birth rates, current and projected, are a social index that is of continuing interest to even the most practical people concerned with school policy and administration. In fact, though, births are not an aspect of the environment that immediately affects the demand for school services. It is the population of students resulting from those births that automatically determines the demand.

The transformation of birth rates into future student populations, or enrolments, incorporates assumptions about a number of aspects of the social environment, notably the survival rate of children, the rate of progression of children through the grades of the school system and the propensity of young people to stay in school past the age of legally required attendance. Current and future enrolments are not simply an index of the required scale of present and future education operations. They are that plus an aspect of the social environment pertinent to the operation and administration of schools, and to the making of policy for guiding the development of the school system.

The projections of the school-age populations done by Statistics Canada, and the projections of enrolments done by this Commission, both presented below, are based on the projections of births in the previous chapter. The projections done by TEIGA¹ are based on that Ministry's own projections of age groups.²

¹Ministry of Treasury, Economics and Intergovernmental Affairs, The Effect of Demographic Change on Enrolment and Use of School Facilities in Ontario to the Year 2001, staff report prepared for the Commission on Declining School Enrolments in Ontario.

²The Ministry of Education prepares short-term enrolment projections and updates these each year. We used their values as "benchmarks" in assessing the validity of the short-term figures of the various other projections up to 1986 or 1987. Since the figures are available from the Ministry, we did not reproduce them here. For the critical year 1987, our most recent projections (elementary and secondary schools) differ by only 0.23%.

Four projections by Statistics Canada of school-age populations, by age groups and for each year to 2001, are offered in Table 3.1. The elementary school age is defined as 5 to 13 inclusive (9 years), and the secondary school age as 14 to 18 inclusive (5 years). (The study also included projections of post-secondary age-group populations, but these are outside the terms of reference of this Commission.) The Table 3.1 figures are presented pictorially in Chart 3.1. The assumptions particular to each projection, and the bases of the differences among the projections, are the postulated fertility and migration rates noted in the footnote to Table 2.2 of the previous chapter.

Projection 3 of this chapter's Table 3.1 is endorsed here as the "most likely" approximation of future school-age populations. This is, in effect, to endorse the assumptions of a fertility rate falling to 1.6 and a net migration rate climbing to 50,000. Projection 4 is also identified as a hypothetical approximation of future enrolments worthy of careful consideration by administrators and policy makers. However, the assumption of a net migration rate of 25,000 is not accepted as the most probable future state of that variable. International immigration is a very important component of Ontario net migration. The low migration rate assumed in projection 4 is related to a prior assumption of a significant reduction in immigration. A permanent complete or near closing of the door to immigrants is not probable, nor is there yet a sign of the implied substantial alteration of federal immigration policy.

Table 3.2 presents the projected enrolments from the TEIGA report. The populations of persons age 5 to 14 and 15 to 19 are presented for each fifth year from 1976 to 2001. TEIGA has used its choice of participation coefficients to calculate the corresponding elementary and secondary projected enrolments. It will be noted below that these projections are in accord with the Commission's own, particularly the population projections.

It may be seen by comparing the population figures from Table 3.2 with the corresponding figures from Table 3.1 for 1981, 1986, 1991, 1996 and 2001, that projections 3 and 4 from Table 3.1 are quite similar to

TABLE 3.1

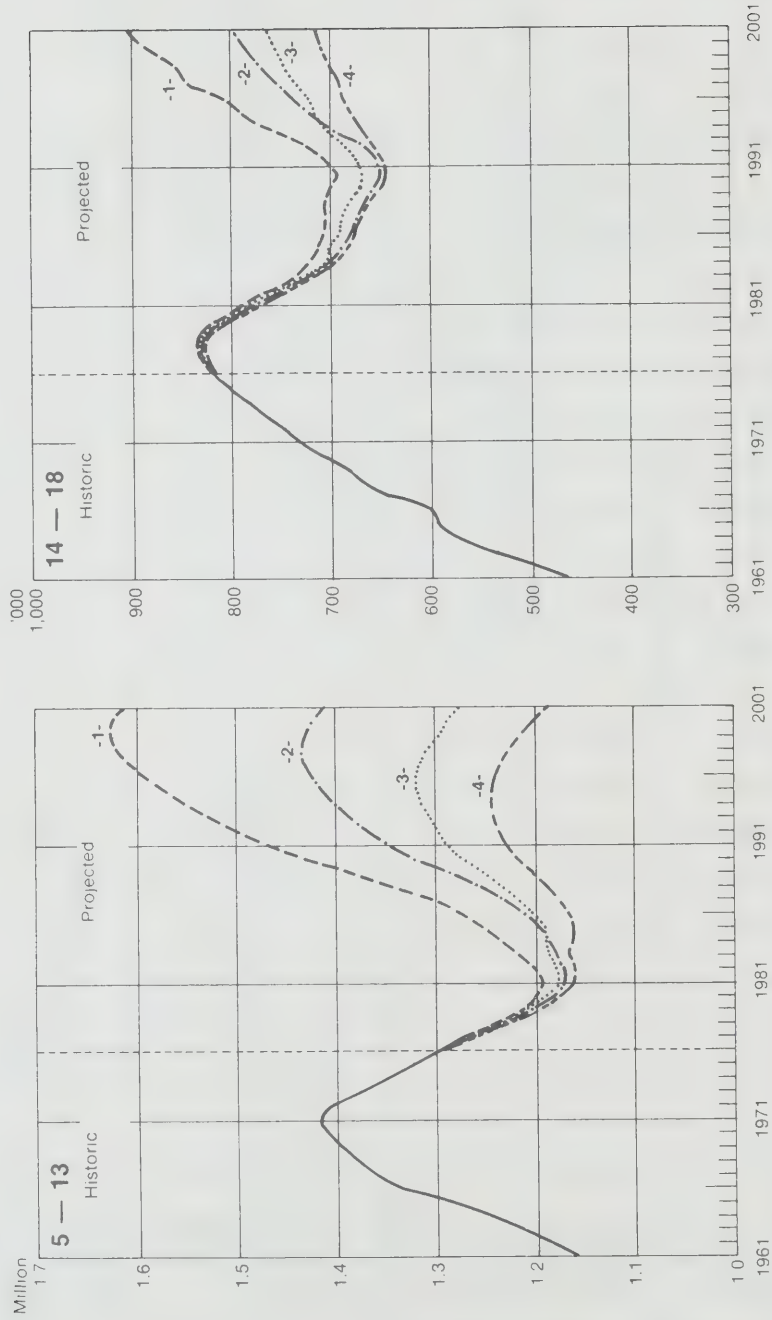
PROJECTED SCHOOL ENROLMENT AGE GROUPS TO YEAR 2001
(In Thousands)

YEAR	PROJECTION 1		PROJECTION 2		PROJECTION 3		PROJECTION 4	
	5-13	14-18	5-13	14-18	5-13	14-18	5-13	14-18
ACTUAL 1976 CENSUS	1302.4	815.9	1302.4	815.9	1302.4	815.9	1302.4	815.9
1977	1272.1	827.9	1270.0	827.0	1270.0	827.0	1267.8	826.0
1978	1241.5	834.6	1236.4	832.3	1237.1	832.7	1232.5	830.6
1979	1214.3	832.2	1205.1	827.9	1206.8	828.9	1199.5	825.7
1980	1200.0	814.6	1185.9	807.8	1189.5	809.8	1179.0	805.1
1981	1192.8	795.1	1172.9	785.5	1178.7	788.6	1164.8	782.4
1982	1203.4	765.5	1176.7	752.9	1182.5	757.4	1164.6	749.3
1983	1218.5	737.9	1184.4	722.1	1188.2	727.9	1166.3	718.0
1984	1232.0	720.9	1189.6	701.8	1189.9	709.3	1163.8	697.5
1985	1246.6	715.1	1195.9	692.5	1190.9	701.5	1160.7	687.9
1986	1272.7	709.5	1212.8	683.2	1201.1	693.9	1166.6	678.4
1987	1305.2	708.8	1234.7	678.6	1216.1	691.3	1177.3	673.7
1988	1343.3	706.1	1262.5	672.1	1235.3	686.6	1192.0	667.0
1989	1381.1	701.2	1289.3	663.3	1252.4	679.8	1204.6	658.0
1990	1423.8	692.9	1320.3	650.9	1271.8	669.4	1219.5	645.8
1991	1459.3	701.6	1344.2	655.0	1285.3	672.7	1228.7	647.0
1992	1492.6	717.1	1365.8	665.7	1297.0	680.7	1236.1	652.8
1993	1522.9	739.0	1385.0	682.6	1305.8	692.7	1241.1	662.7
1994	1549.8	761.2	1401.1	699.1	1312.0	702.8	1243.6	670.5
1995	1573.3	788.4	1414.7	720.1	1315.8	716.0	1243.7	681.2
1996	1593.1	809.7	1424.3	734.9	1315.8	724.8	1240.8	687.2
1997	1608.1	830.5	1430.4	748.8	1312.9	733.6	1234.9	698.7
1998	1617.7	850.7	1431.8	762.3	1306.9	742.1	1226.3	699.9
1999	1622.0	870.0	1428.6	775.1	1298.4	750.1	1215.5	705.5
2000	1622.3	887.9	1422.2	786.8	1288.0	756.6	1202.6	710.0
2001	1618.9	903.9	1412.9	796.8	1276.6	761.2	1189.4	712.4

CHART 3.1

ONTARIO

ALTERNATIVE PROJECTIONS OF SELECTED SCHOOL-AGE POPULATIONS, 1961-2001



Source: Statistics Canada, and Canadian Teachers' Federation,
The Class of 2001; Ottawa 1978.

TABLE 3.2

THE MOST LIKELY POPULATION,
ELEMENTARY AND SECONDARY SCHOOL ENROLMENT TRENDS,
(Projection IV) ONTARIO, 1981 TO 2001

YEAR	POPULATION			PROJECTED ENROLMENT	
	AGE GROUPS		ALL AGE GROUPS (ZERO TO 85+)	ELEMENTARY	SECONDARY
	5 TO 14	15 TO 19			
	(Million)	(Million)	(Millions)	(Million)	(Million)
1976	1.47	0.81	8.26	1.36	0.61
1981	1.32	0.82	8.93	1.25	0.58
1986	1.33	0.68	9.52	1.26	0.51
1991	1.36	0.67	10.08	1.29	0.51
1996	1.37	0.69	10.60	1.30	0.53
2001	1.34	0.70	11.00	1.27	0.54

Source: Social and Economic Data, Central Statistical Services,
Ministry of Treasury, Economics and Intergovernmental Affairs, 1978.

the population projection in Table 3.2. The elementary school age group is defined as 5 to 14 inclusive by TEIGA (10 years), and the secondary school age group is defined as 15 to 19 (5 years), so precise comparisons are not possible.

The Commission's preliminary projections of school enrolments were presented and reported upon in considerable detail in the Second Interim Report. At the time they were made they were described by many interested parties as presenting unrealistically low future enrolment figures. In particular, the projected birth figures on which they were based were criticized as too low. Since then information has mounted supporting the position that future enrolments will be lower than they have heretofore been projected to be. And the assumptions of lower than previously expected birth rates seems more appropriate with the passing of each month.

The recent projections of Statistics Canada and TEIGA generally support the downward revisions of most enrolment projections done for Ontario (and for that matter for many other jurisdictions). It will be noted, however, that the Commission's preliminary projections of both student-age populations and enrolments are lower than those of either Statistics Canada or TEIGA (pp. 8-9, Second Interim Report).

The preliminary enrolment projection presented in the Second Interim Report is still very close to the best picture of future conditions that can be offered. This projection is presented in Table 3.3 and graphically depicted in Chart 3.2. The differences among the TEIGA, Statistics Canada (projections 3 and 4) and the Commission's preliminary projections of future school-age populations and enrolments notwithstanding, they have in common a pattern of declining elementary school age populations and enrolments into the mid-1980's, followed by a gradual increase until the mid-1990's and then a gradual decrease into the new century, and declining secondary school enrolments until about 1992 or 1993 followed by a gradual increase continuing past 2001 (with an implied decline soon thereafter). Collectively, these several sets of projections indicate a willingness on the part of those doing projections

TABLE 3.3

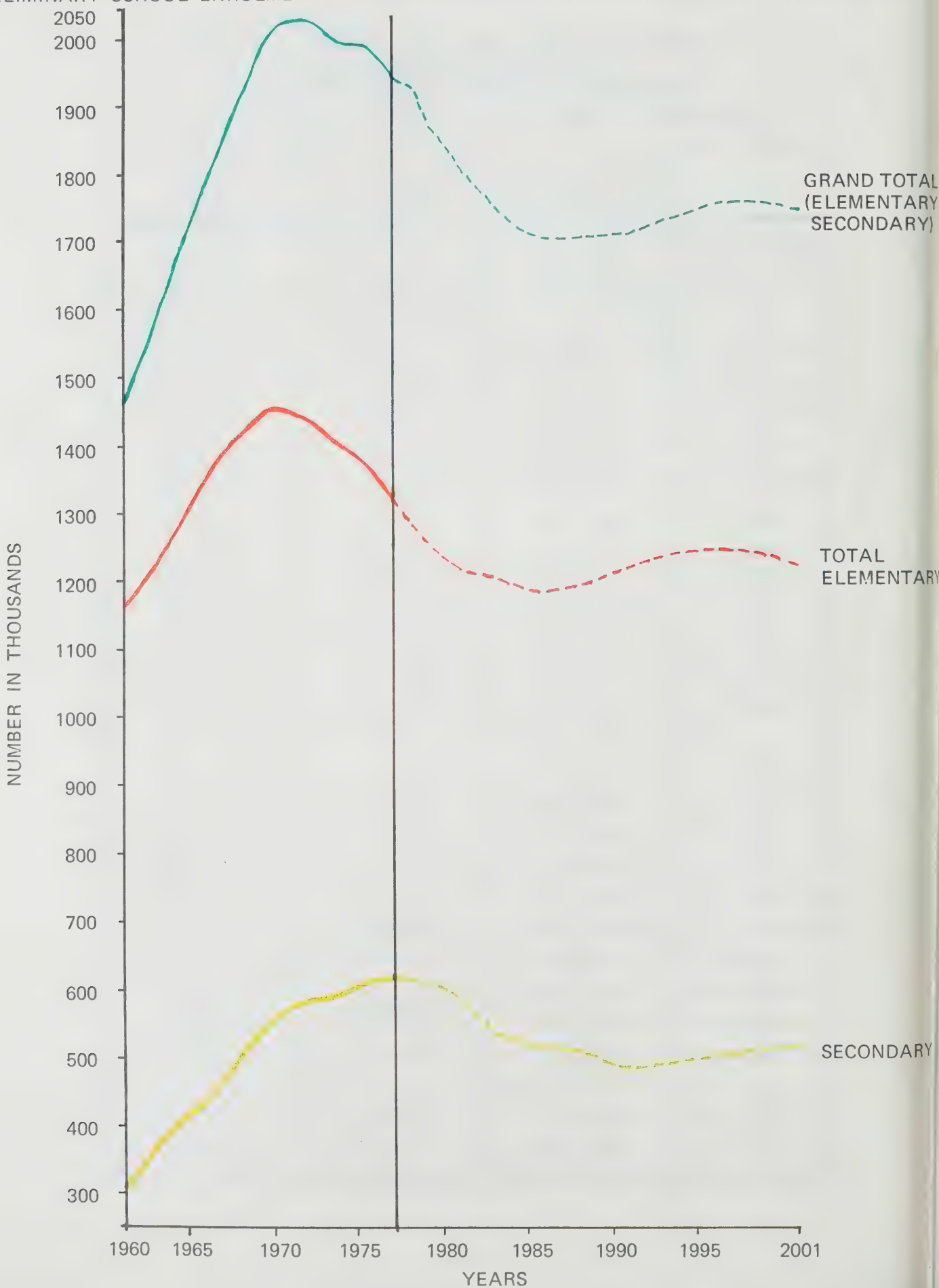
THE COMMISSION ON DECLINING SCHOOL ENROLMENTS IN ONTARIO,
PRELIMINARY PROJECTIONS OF
ELEMENTARY AND SECONDARY SCHOOL ENROLMENT

ASSUMPTIONS: FERTILITY 1.6; NET ANNUAL MIGRATION 50,000

YEAR	TOTAL ELEMENTARY SCHOOL ENROLMENT	SECONDARY SCHOOL ENROLMENT	TOTAL ENROLMENT
1976 (Actual)	1,360,085	613,055	1,973,140
1977 (Actual)	1,329,396	613,830	1,943,226
PROJECTIONS			
1978	1,294,640	613,025	1,907,665
1979	1,262,551	610,438	1,872,989
1980	1,241,370	601,339	1,842,709
1981	1,224,558	585,035	1,809,593
1982	1,218,645	561,091	1,779,736
1983	1,213,866	538,528	1,752,394
1984	1,204,538	524,316	1,728,854
1985	1,194,299	518,480	1,712,779
1986	1,192,366	513,370	1,705,736
1987	1,195,410	511,484	1,706,894
1988	1,203,041	507,294	1,710,335
1989	1,209,885	500,075	1,709,960
1990	1,221,451	489,105	1,710,556
1991	1,230,490	485,341	1,715,831
1992	1,238,533	485,023	1,723,556
1993	1,245,022	488,341	1,733,363
1994	1,250,027	491,123	1,741,150
1995	1,253,360	496,855	1,750,215
1996	1,254,787	501,043	1,755,830
1997	1,254,575	504,719	1,759,294
1998	1,252,402	507,851	1,760,253
1999	1,247,676	511,038	1,758,714
2000	1,240,847	513,984	1,754,781
2001	1,232,358	516,390	1,748,748

CHART 3.2

PRELIMINARY SCHOOL ENROLMENT PROJECTIONS PRESENTED IN THE SECOND INTERIM REPORT



to accept ever lower fertility rates as "probable" and a propensity to make assumptions over a very wide range concerning net migration.

The projections presented in Table 3.3 and all the preliminary projections offered in the Second Interim Report are based on the application of assumed participation coefficients to present and future age-specific populations. In order to secure more refined and valid projections the Commission has prepared a further two projections based on the generally accepted grade-cohort-survival method.

In the first of these, the annual cohorts of actual and projected live births were each "carried-through" the preschool, elementary* and secondary years, with a coefficient of survival (biological and academic) applied to estimate the number in each grade of school. The results as presented in Table 3.4 and Chart 3.3 represent the sum of the projected enrolments for all the grades of elementary school and all the grades of secondary school. The projected live births on which these enrolment projections were based were produced by this Commission with their own specifications using the Statistics Canada projection model.

The second projection of this type used actual and projected numbers of four-, five- and six-year olds rather than live births. The projected numbers for each of these age groups may be taken from the population projections by single years of age produced by the Commission for Ontario.

The results of these two projection exercises are presented in Tables 3.4 and 3.5 and Charts 3.3 and 3.4. The resulting enrolment figures are similar to but slightly lower than those in Table 3.3. There is no notable difference in the patterns of projected enrolment developments presented in Tables 3.3, 3.4 and 3.5.

Of these projections, the one recommended by the Commission for use is that based on live births as given in Table 3.4.

*The exercise was done separately for public schools and separate schools, and then these estimates were combined to give total elementary school enrolments.

TABLE 3.4

PROJECTIONS OF SCHOOL ENROLMENT BASED ON LIVE BIRTHS

YEAR	PUBLIC SCHOOLS	SEPARATE ⁽¹⁾ SCHOOLS	TOTAL ELEMENTARY SCHOOLS	SECONDARY SCHOOLS	TOTAL ENROLMENT
1976	937,292	422,793	1,360,085	613,055	1,973,140
1977	907,777	421,619	1,329,396	613,830	1,943,226
1978	877,767	416,384	1,294,151	613,274	1,907,425
1979	855,425	412,381	1,267,806	603,415	1,871,221
1980	842,030	409,889	1,251,919	583,206	1,835,125
1981	833,580	408,281	1,241,861	557,412	1,799,273
1982	826,437	407,610	1,234,047	531,581	1,765,628
1983	818,699	407,138	1,225,837	514,224	1,740,061
1984	809,930	406,121	1,216,051	508,522	1,724,573
1985	804,856	405,205	1,210,061	505,703	1,715,764
1986	804,300	405,147	1,209,447	500,072	1,709,519
1987	805,704	405,477	1,211,181	493,220	1,704,401
1988	807,489	406,433	1,213,922	485,420	1,699,342
1989	808,701	407,119	1,215,820	479,667	1,713,487
1990	812,357	408,509	1,220,866	473,863	1,694,729
1991	815,676	409,765	1,225,441	471,670	1,697,111
1992	818,715	411,281	1,230,046	470,596	1,700,642
1993	821,181	412,505	1,233,686	470,431	1,704,117
1994	822,950	413,440	1,236,390	471,531	1,707,921
1995	823,969	413,997	1,237,966	474,100	1,712,066
1996	824,038	414,020	1,238,058	476,696	1,714,754
1997	822,926	413,489	1,236,415	479,037	1,716,452
1998	820,520	412,382	1,232,902	481,161	1,714,063
1999	816,958	410,725	1,227,683	482,948	1,710,631
2000	812,238	408,556	1,220,794	484,389	1,705,183
2001	806,588	405,960	1,212,548	485,500	1,698,048

(1) Includes Grade 9 and 10 students enrolled in separate schools.

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CHART 3.3

PROJECTIONS OF SCHOOL ENROLMENT BASED ON LIVE BIRTHS

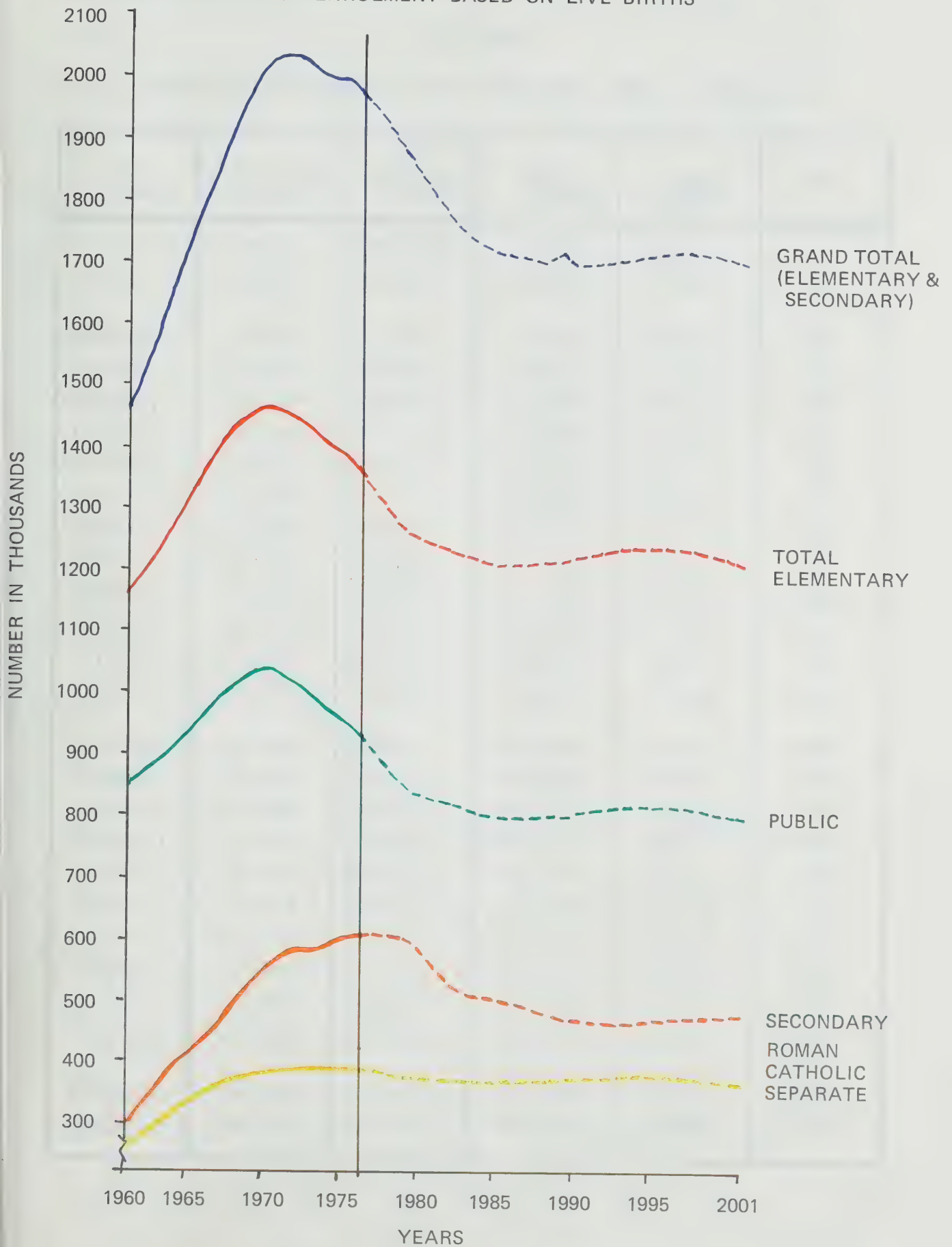


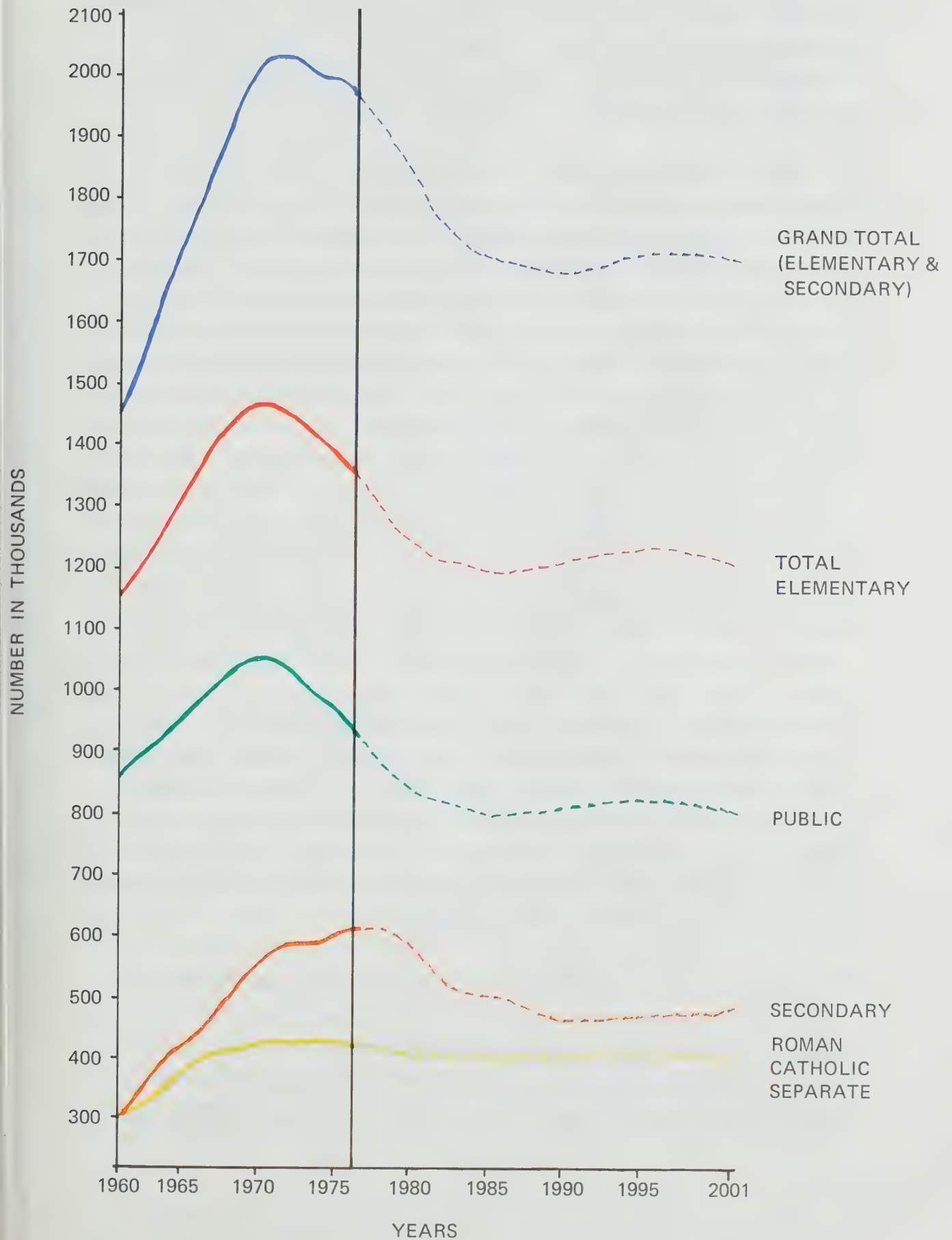
TABLE 3.5

PROJECTIONS OF SCHOOL ENROLMENT BASED ON NUMBER OF SIX-YEAR OLDS

YEAR	PUBLIC SCHOOLS	SEPARATE SCHOOLS	TOTAL ELEMENTARY SCHOOLS	SECONDARY SCHOOLS	TOTAL ENROLMENT
1976	937,292	422,793	1,360,085	613,055	1,973,140
1977	907,777	421,619	1,329,396	613,830	1,943,226
1978	875,933	416,197	1,292,130	613,274	1,905,404
1979	850,421	410,859	1,261,280	603,415	1,864,695
1980	833,844	407,289	1,241,133	583,206	1,824,339
1981	822,677	405,061	1,227,738	557,412	1,785,150
1982	816,290	404,458	1,220,748	531,581	1,752,329
1983	809,652	404,065	1,213,717	514,224	1,727,941
1984	801,575	402,956	1,204,531	508,522	1,713,053
1985	796,826	401,813	1,198,639	505,703	1,704,342
1986	796,488	401,478	1,197,966	502,974	1,700,940
1987	798,273	401,389	1,200,112	494,843	1,694,955
1988	802,017	403,298	1,205,315	482,814	1,688,129
1989	804,673	404,614	1,209,287	474,322	1,683,609
1990	809,755	406,941	1,216,696	467,093	1,683,789
1991	812,957	408,515	1,221,472	466,797	1,688,269
1992	816,053	410,256	1,226,309	468,548	1,694,857
1993	818,617	411,440	1,230,057	471,181	1,701,238
1994	820,623	412,365	1,232,988	473,783	1,706,771
1995	822,062	412,978	1,235,040	476,101	1,711,141
1996	822,693	413,207	1,235,900	477,244	1,713,144
1997	822,466	412,978	1,235,218	478,476	1,713,694
1998	820,466	412,189	1,232,655	479,970	1,712,625
1999	817,028	410,714	1,227,742	482,292	1,710,034
2000	812,232	408,620	1,220,852	484,937	1,705,789
2001	806,379	405,960	1,212,339	487,361	1,699,700

CHART 3.4

PROJECTIONS OF SCHOOL ENROLMENT BASED ON SIX YEAR OLDS



The grade-cohort-survival method of projection also provided the enrolment projections by grade. These are extremely important data to management staff of the school system, but not of direct interest in this general discussion of future conditions. The enrolment projections by grade are to be found in Statistical Appendix #8.

To make the projections of enrolment levels useful, it remains to specify where in Ontario the enrolment changes will take place. In this enormous province, provincial changes in enrolments are not expected to approximate changes in the jurisdiction of a given board. Projections of enrolment at the level of the school board to the year 2001 are available in Statistical Appendix #8. They were prepared using the same cohort-survival method applied to actual and projected live births. They give for each board a long-range perspective up to 2001, based on past and present live birth and grade retention rates. It may be that short-range developments will differ somewhat from the long-term projections, but it is expected they will, in general, follow the long-term trend. Enrolment projections at the local level, of course, require information about and familiarity with local social and economic conditions and seldom extend past a short term of one to three years. They must, in the final analysis, be the products of local administrators or planners. However, for those boards that do not already have projections they consider better than those offered here, a first estimate of future enrolments can be produced by making such adjustments in the Commission's projections as seem appropriate in light of what is known about local conditions and trends. In the case of the small boards of northern Ontario, the projections were done "manually" (i.e., not by computer model), and do not extend to the end of the century. The variability of conditions there causes probability of error in long-run projections to be so high as to make the effort foolhardy.

These projections by boards should be reviewed and revised annually, by the boards and by the Ministry of Education as has been done to date for them under contract by the Department of Educational Planning of the Ontario Institute for Studies in Education. Separate projections should now be done for the schools for French language and

English language schools, and of course for Northern Ontario, in order that the series of projections begun by my Commission may be continued.

The projected total enrolments by board are presented separately for public schools, separate schools and secondary schools in Tables 3.6, 3.7 and 3.8 respectively, for the years 1971, 1977, 1991, 1996 and 2001, (as indicated earlier, projected enrolments by grade for each year are to be found in Statistical Appendix #8). The oft noted wide variations in decline and growth across the boards become more marked as the years go by. But there is a pattern in this variation, and it at least seems stable: heavy losses in northern and eastern Ontario, stable enrolments in many parts of central Ontario, and substantial growth, for the near future at least, in suburban areas adjoining the metropolitan centres. It is also to be noted that separate school declines are generally much less common than public school declines and tend to be much less severe in the cases where they do appear. There is an important qualifier to this generalization, however. The difference in enrolment changes between separate and public schools does not appear to reflect a birth phenomenon, but rather a persistent and significant shift of enrolments from public schools to separate schools, in keeping with the long-term objective of the separate schools to provide a Roman Catholic education for every Roman Catholic child in the province.

The most dramatic pattern is the decline in public school and secondary school enrolments in all the big cities. The school systems in many urban areas will be drastically reduced before the end of the century, barring some remarkable change in urban development plans or in consumer choices in housing. Nevertheless, our inner cities apparently are not suffering from any flight from them by families or single adults. Instead, they seem, for the most part, to be experiencing the growing-up of the previous generation of children and the construction of real estate development that does not offer facilities for new young families.

Charts 3.5 to 3.34 depict the percentage losses and gains (losses red, gains blue) from 1971 to each of the years shown and from 1977 to each of these years for each board. These bar-graphs quite dramatically demonstrate the different impacts of the declining enrolments that will

- 1 EXCLUDING OTTAWA
- 2 EXCLUDING WINDSOR
- 3 EXCLUDING LONDON
- 4 EXCLUDING HAMILTON

ACTUAL AND PROJECTED CHANGE IN ROMAN CATHOLIC SEPARATE SCHOOL ENROLLMENT BY COUNTIES AND DISTRICTS, 1971-2001

	ACTUAL				PROXIMATE				C H A N G E																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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characterize the quarter century 1976 to 2001. Even these marked differences hide the remarkable variation in enrolment changes within many boards, from losses in one section to gains in another. It is clear that whatever we can say about declining enrolments as a provincial phenomenon does not necessarily have a great deal of relevance at the board level, although there are some boards that show "average" declines. Doubtless, some difficult decisions are called for by provincial policy makers, but the decisions that will have to be made by board members and administrators will be more numerous and at least as difficult. It is they who deal directly and often with sometimes hostile community reactions to new policy or organizational responses to changing conditions.

Chart 3.5

ONTARIO PUBLIC SCHOOL ENROLMENT, 1971-1977

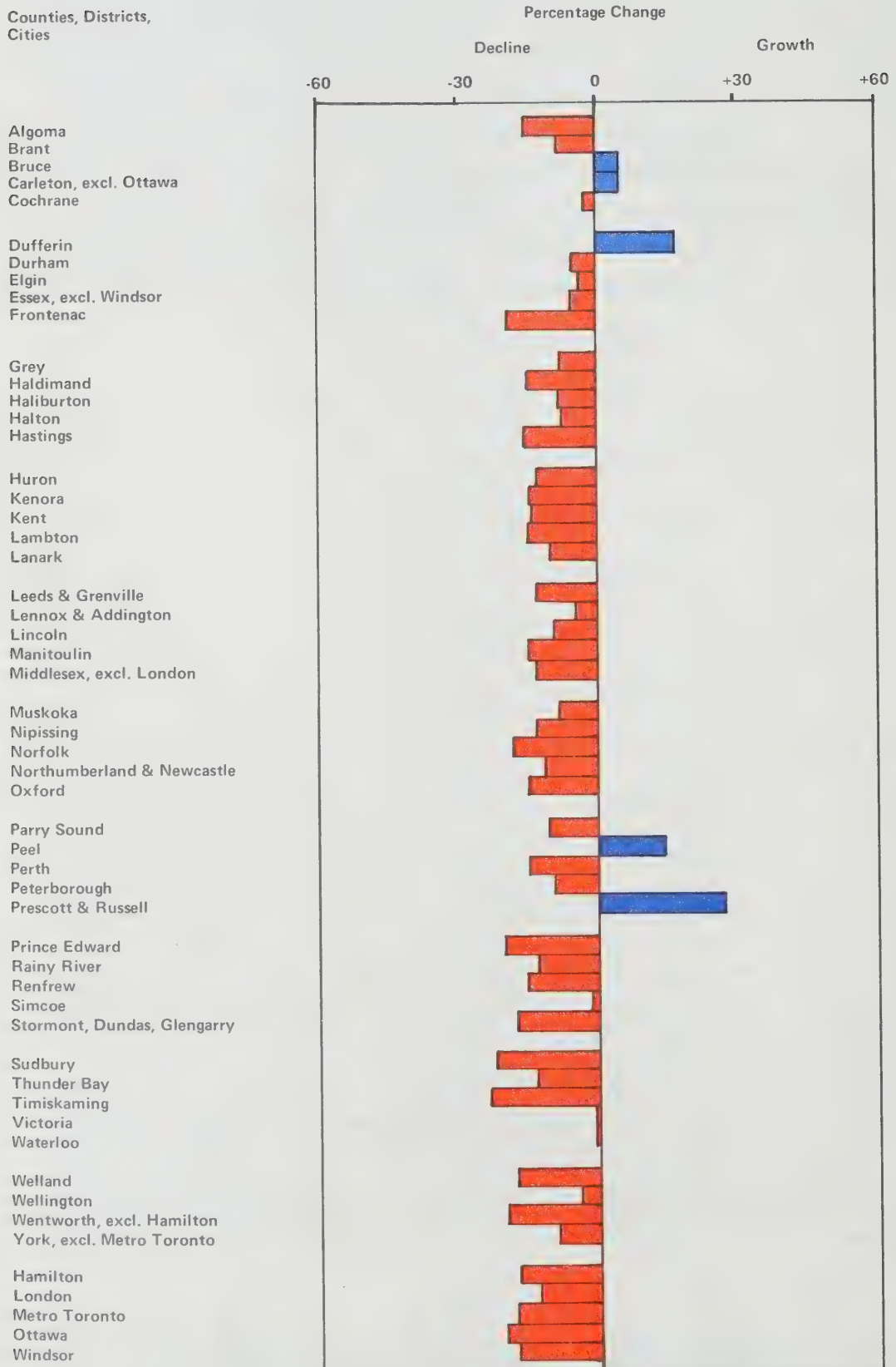


Chart 3.6

ONTARIO PUBLIC SCHOOL ENROLMENT, 1971-86

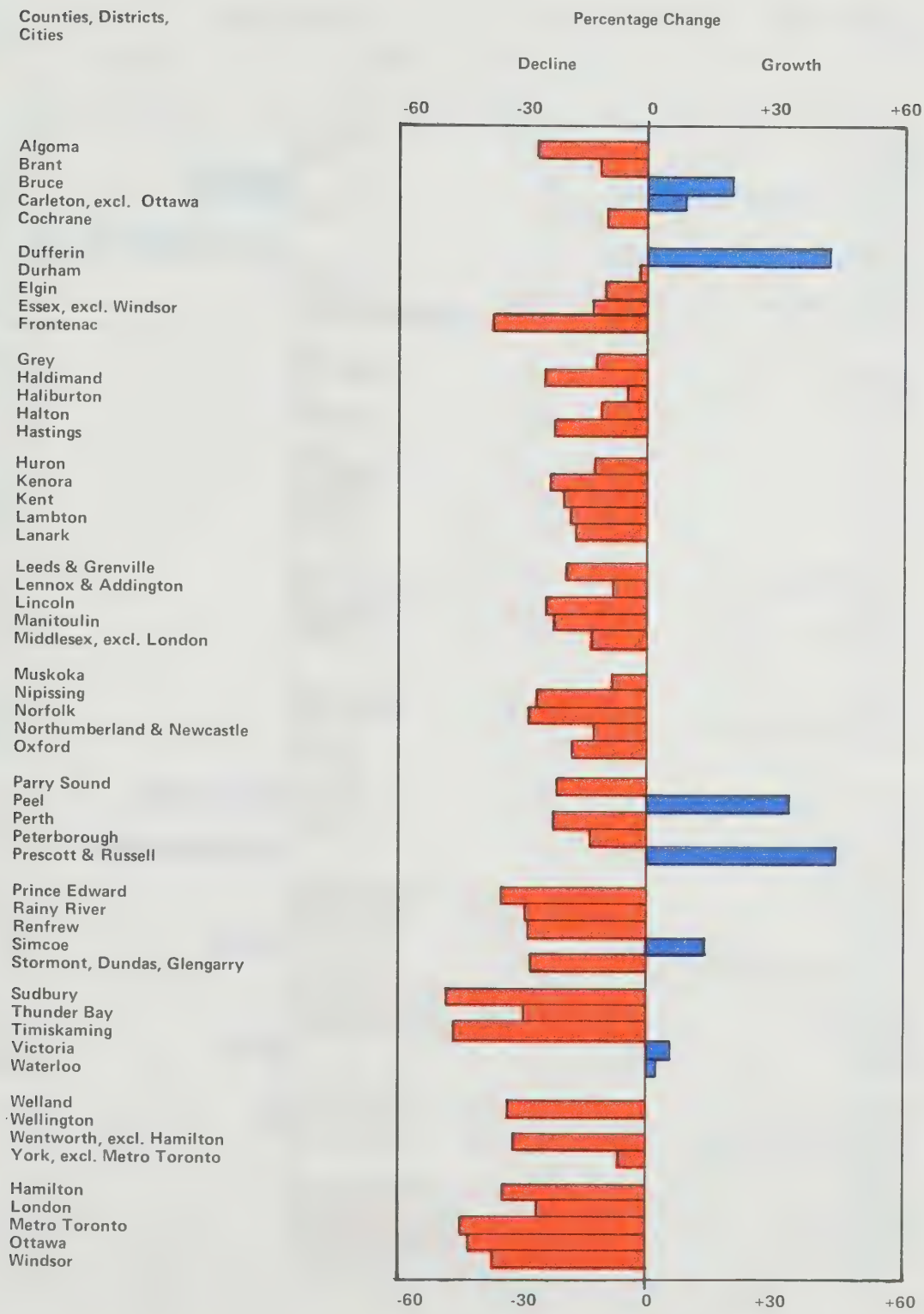


Chart 3.7

ONTARIO PUBLIC SCHOOL ENROLMENT, 1971-91

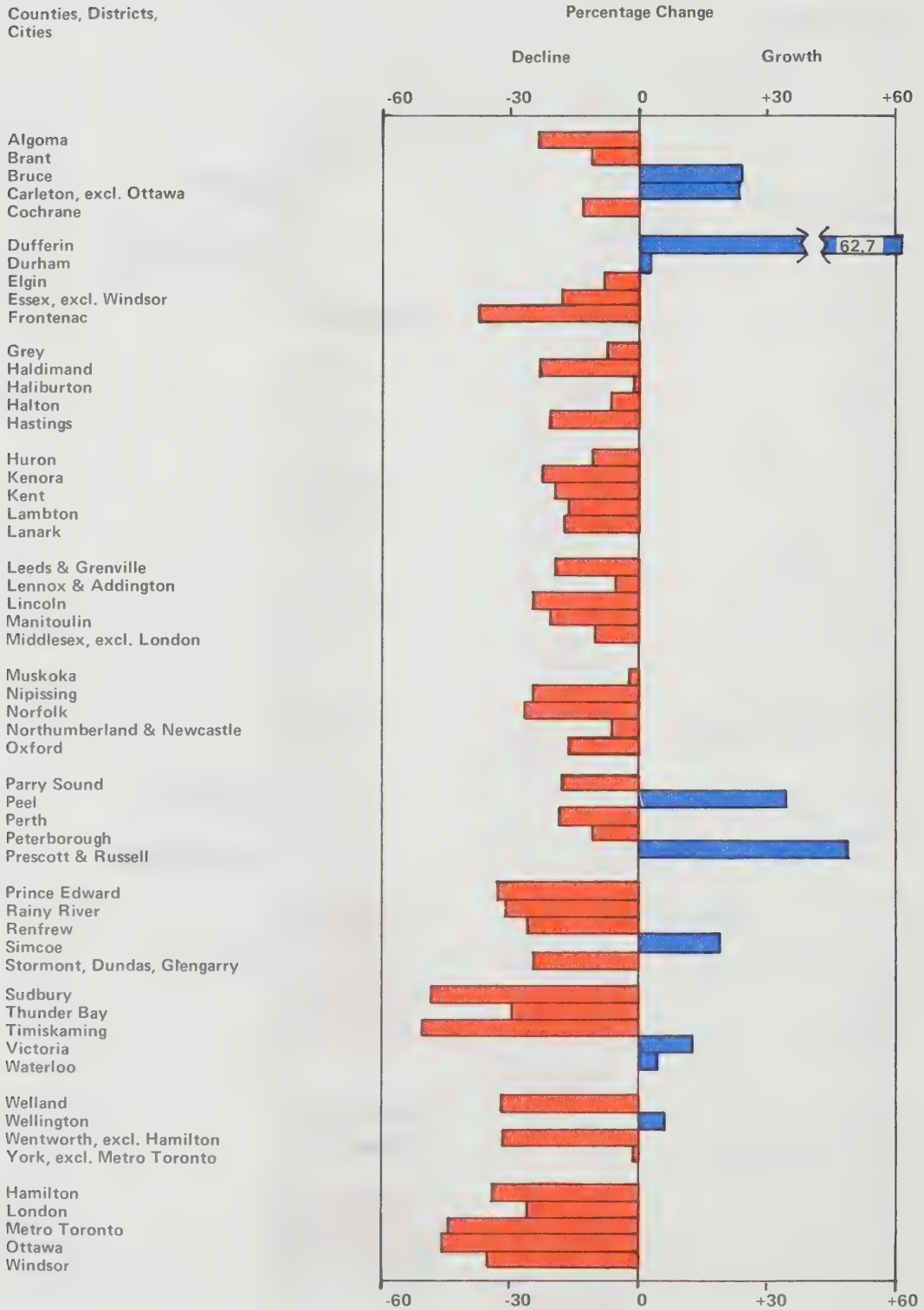


Chart 3.8

ONTARIO PUBLIC SCHOOL ENROLMENT, 1971-96

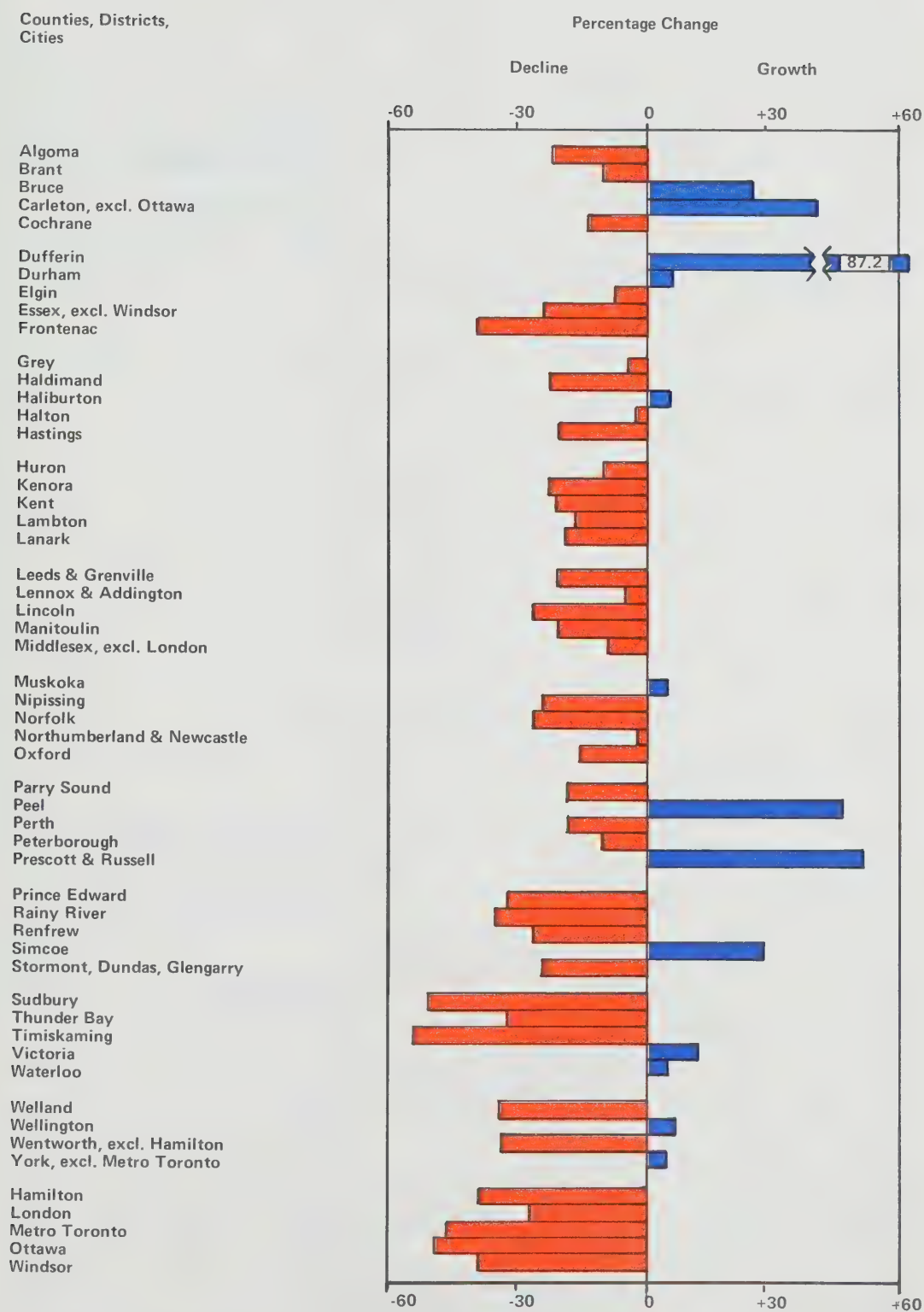


Chart 3.9

ONTARIO PUBLIC SCHOOL ENROLMENT, 1971-2001

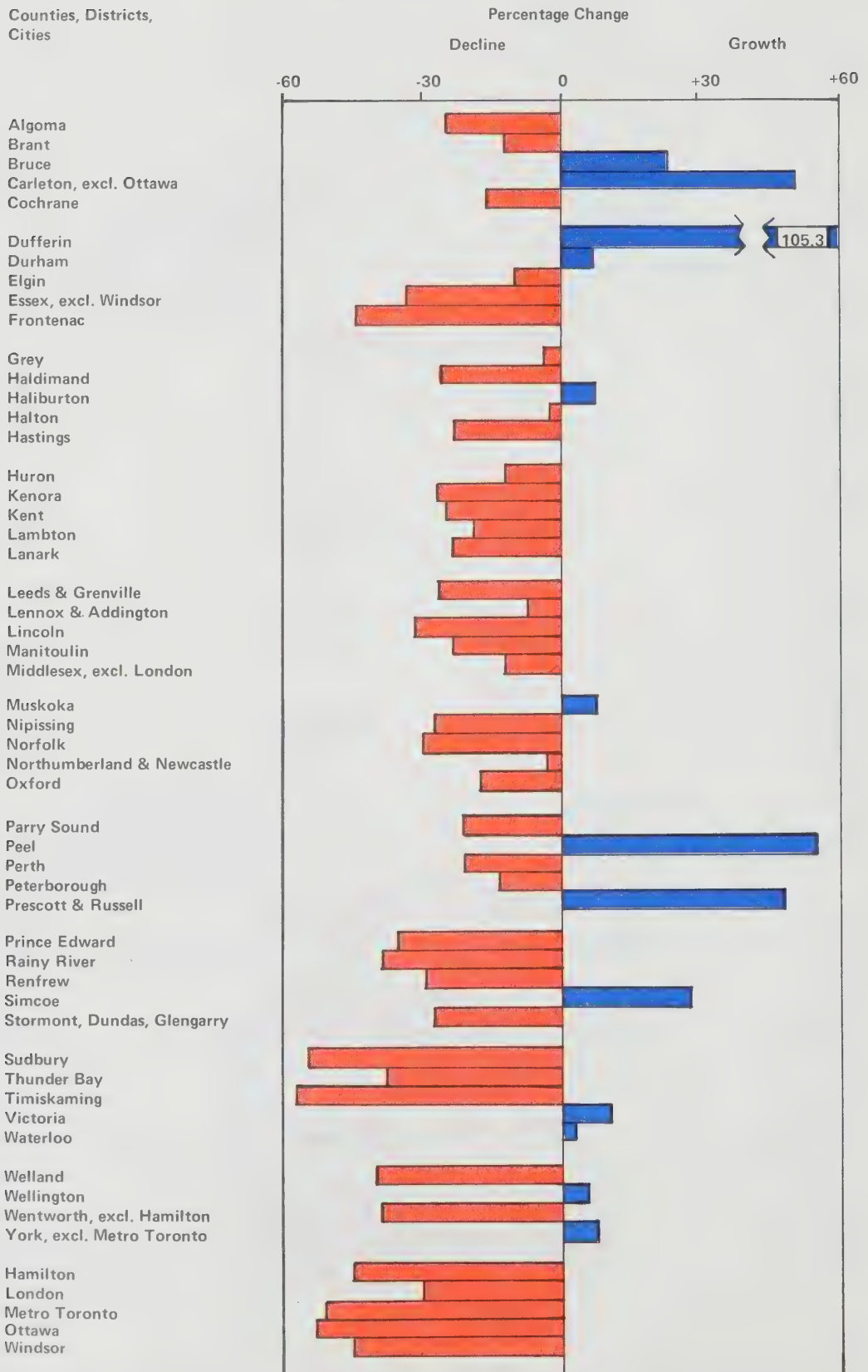


Chart 3.10

ONTARIO PUBLIC SCHOOL ENROLMENT, 1977-1986

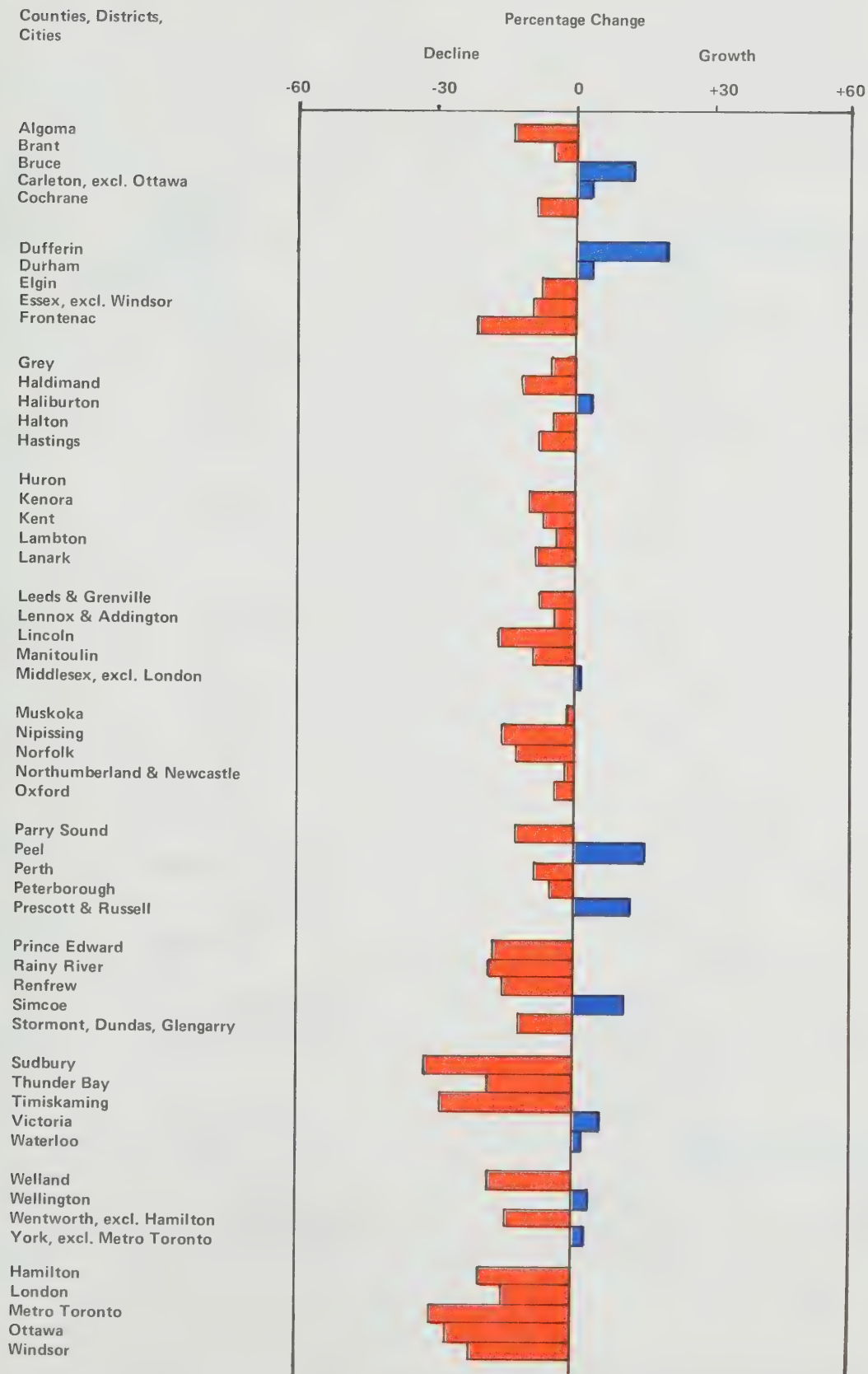


Chart 3.11

ONTARIO PUBLIC SCHOOL ENROLMENT, 1977-1991

Counties, Districts,
Cities

Percentage Change

Decline

Growth

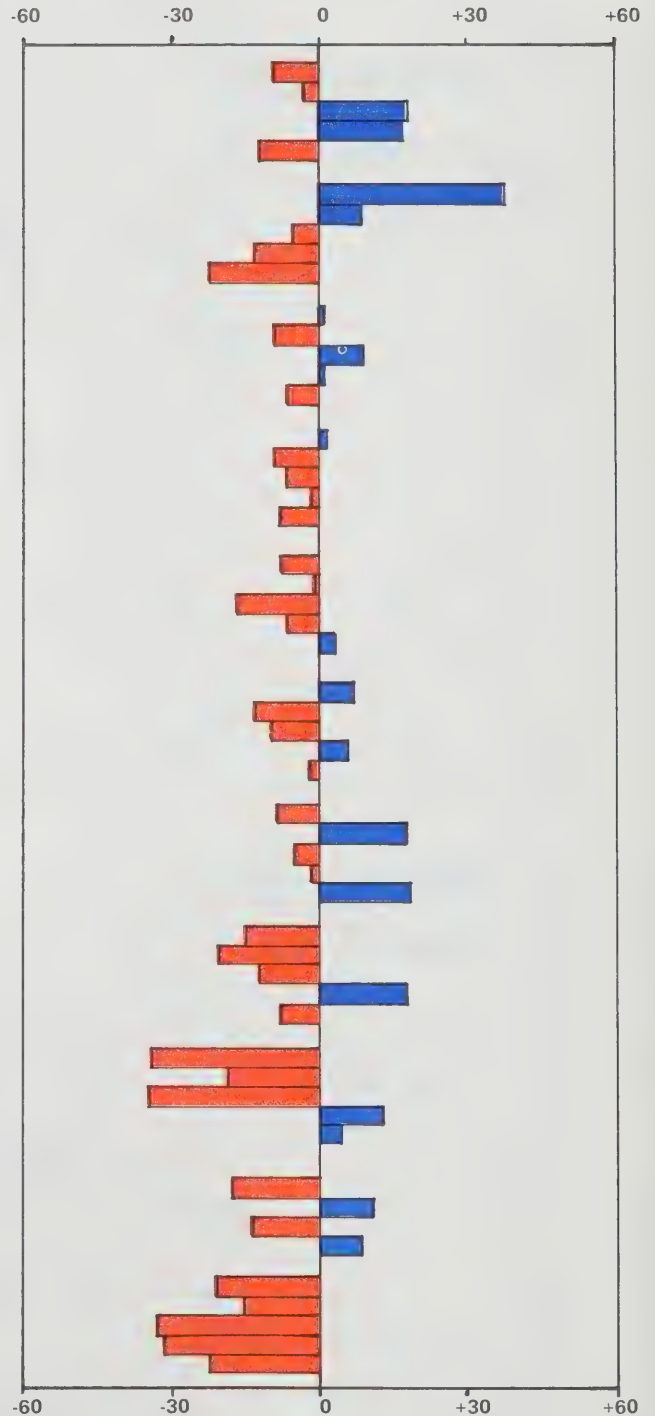
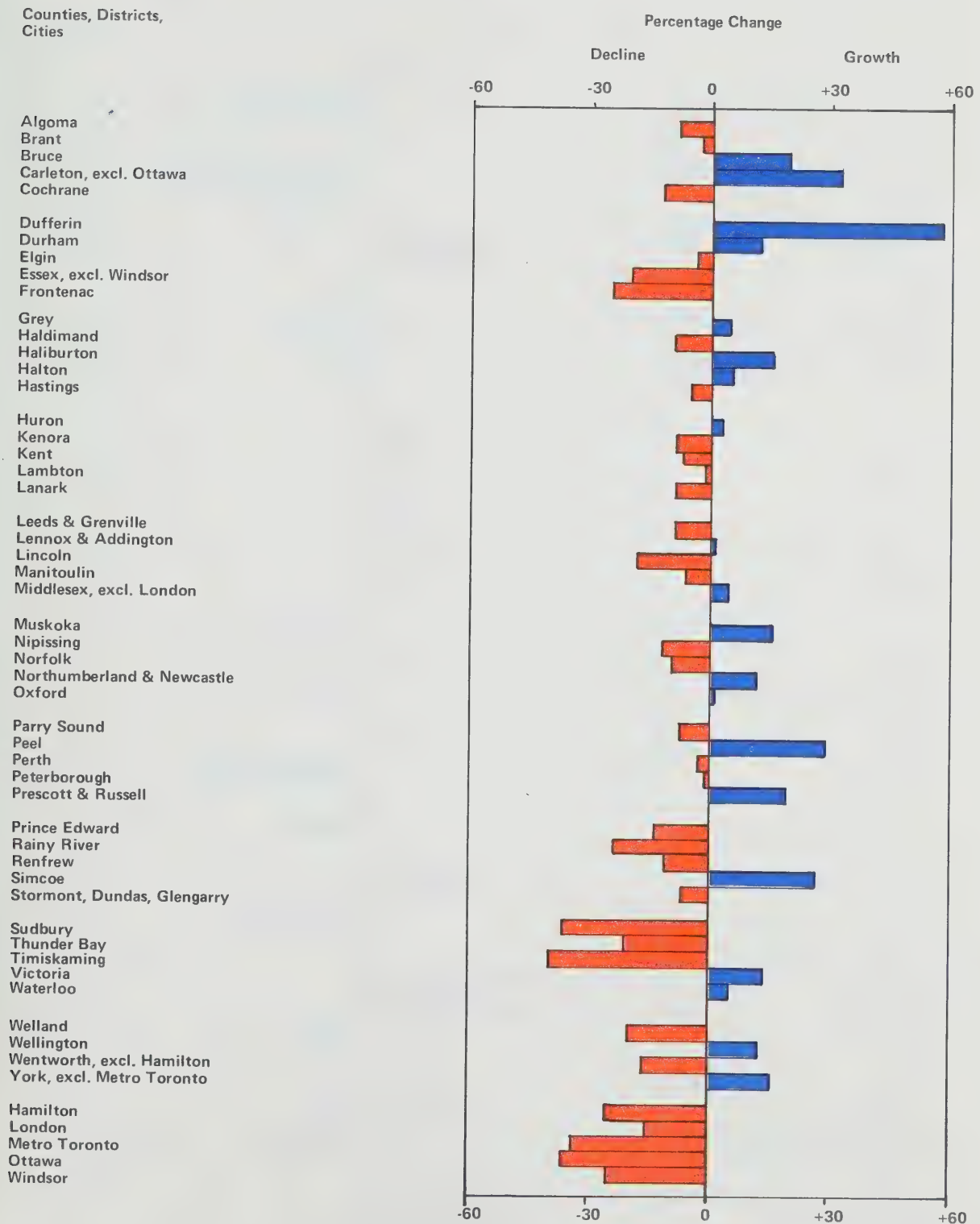


Chart 3.12

ONTARIO PUBLIC SCHOOL ENROLMENT, 1977-1996



70
Chart 3.13

ONTARIO PUBLIC SCHOOL ENROLMENT, 1977-2001

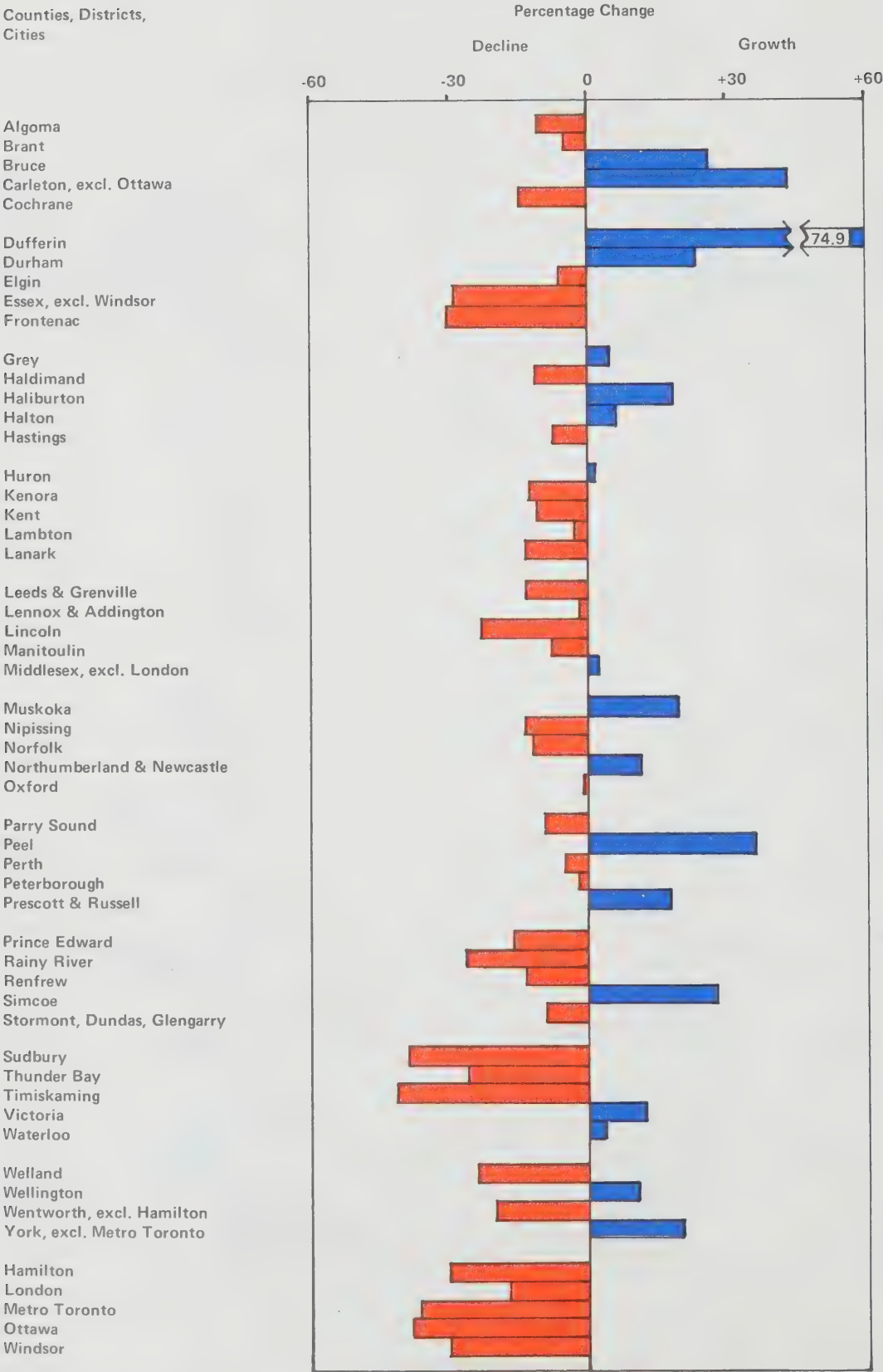


Chart 3.14

ONTARIO PUBLIC SCHOOL ENROLMENT, 1986-2001

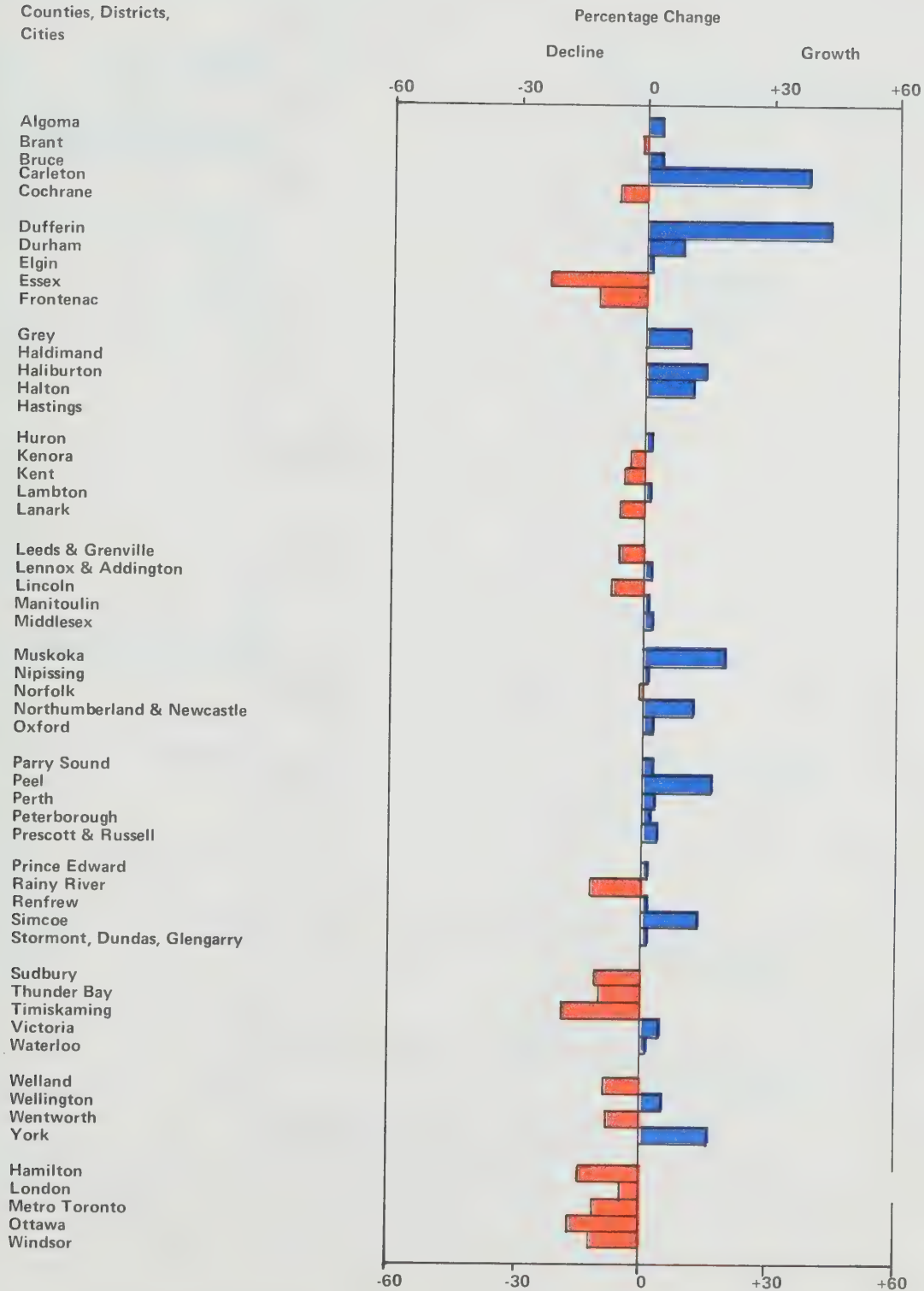


Chart 3.15

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1971-1977

Counties, Districts,
Cities

Percentage Change

Decline

Growth

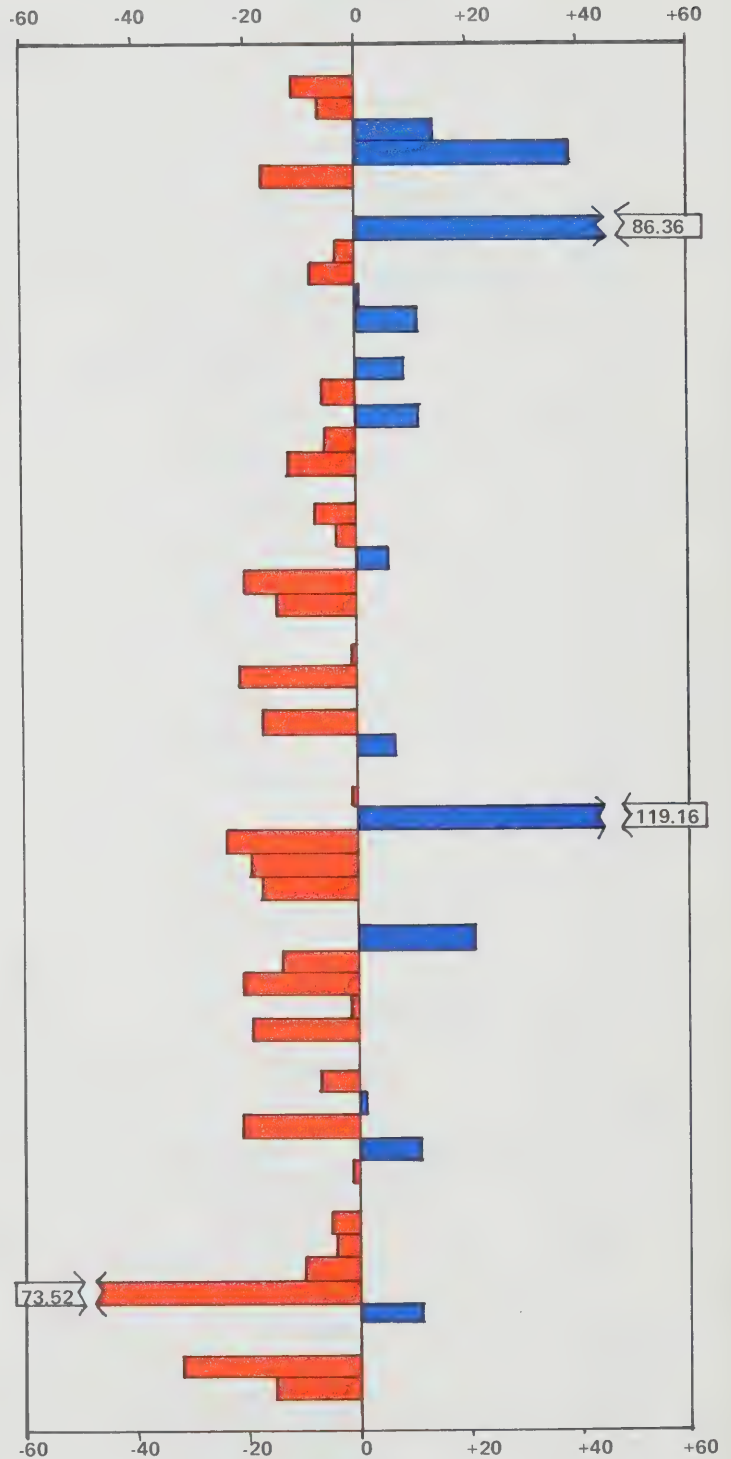


Chart 3.16

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1971-86

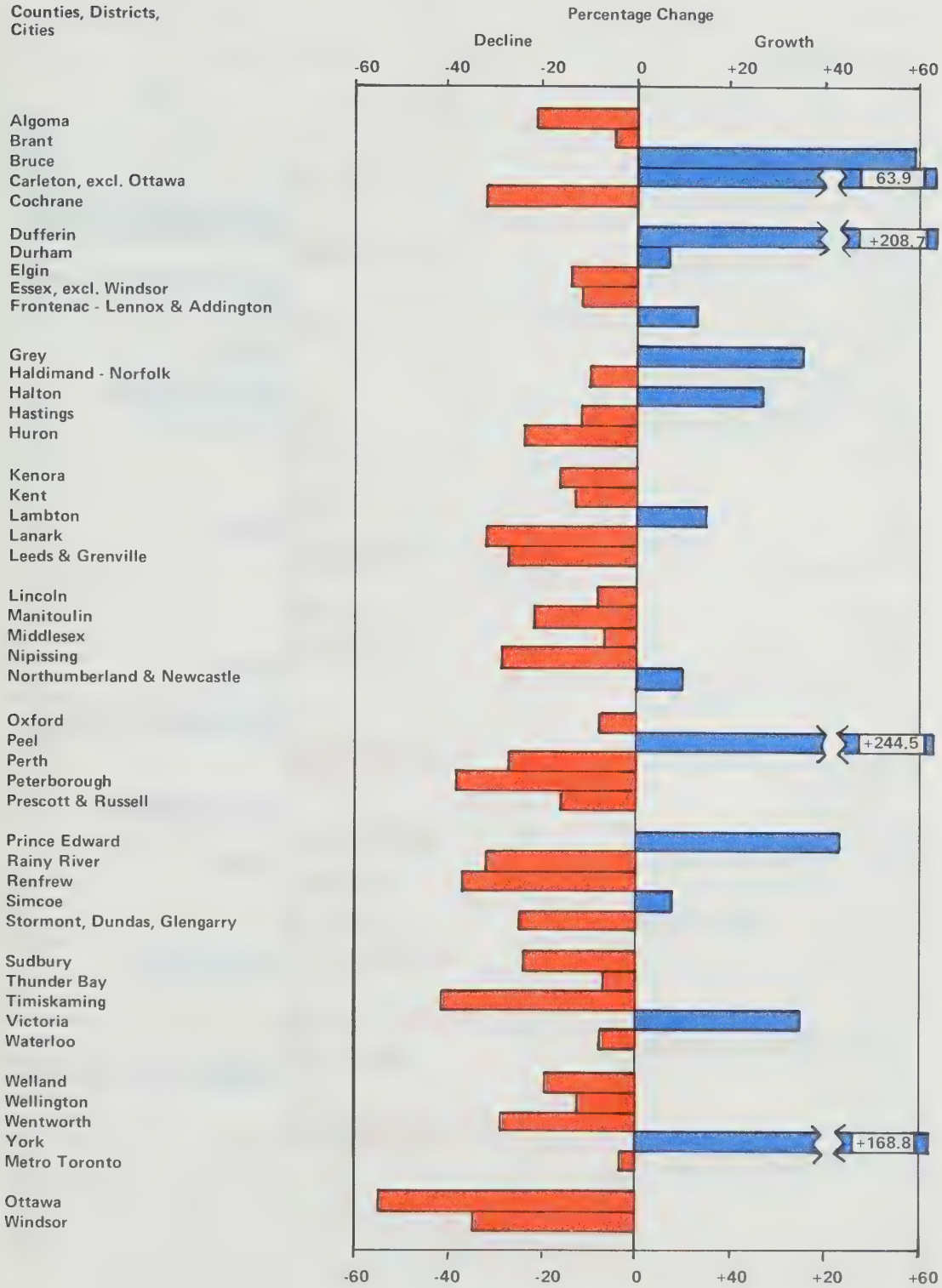


Chart 3.17

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1971-1991

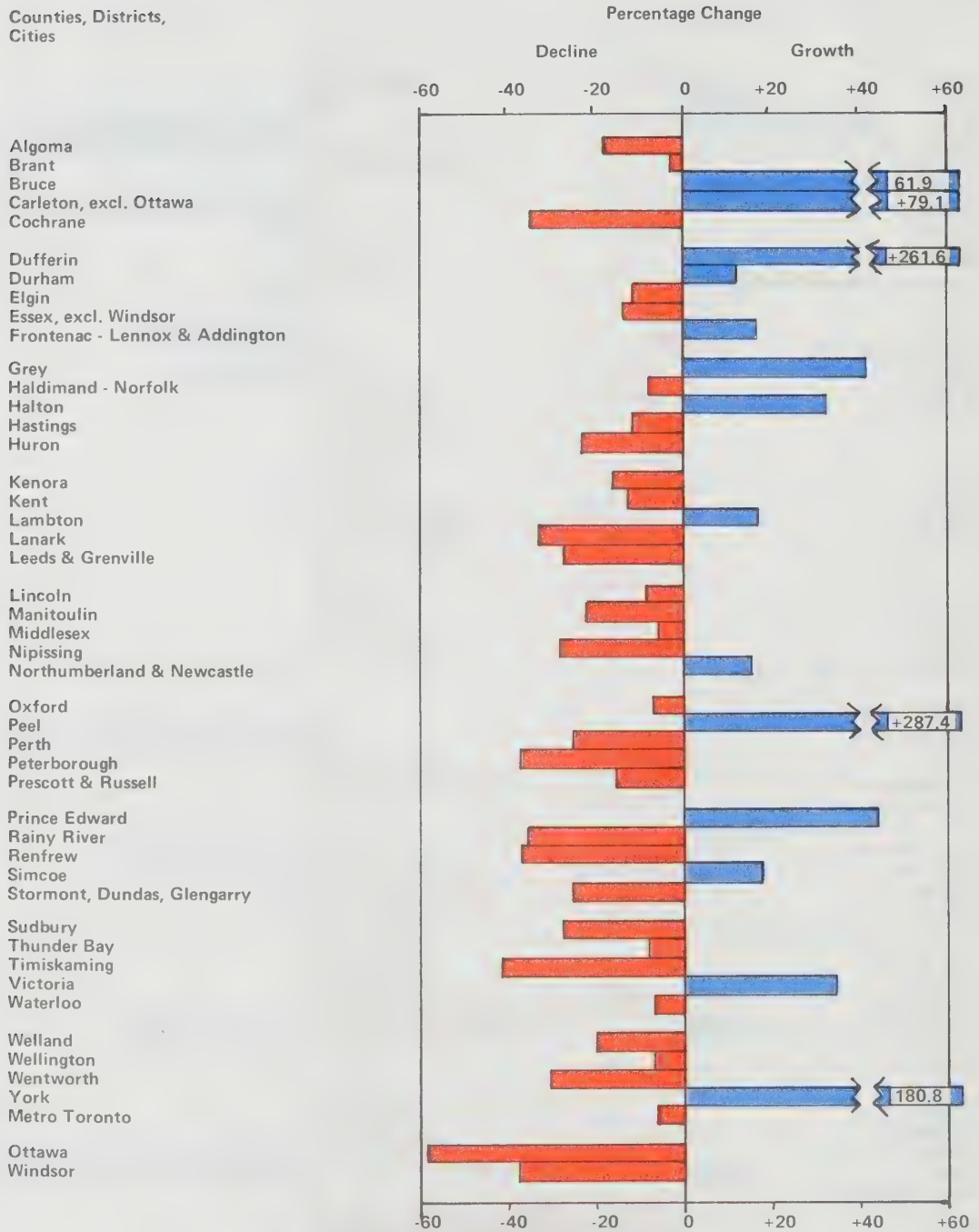
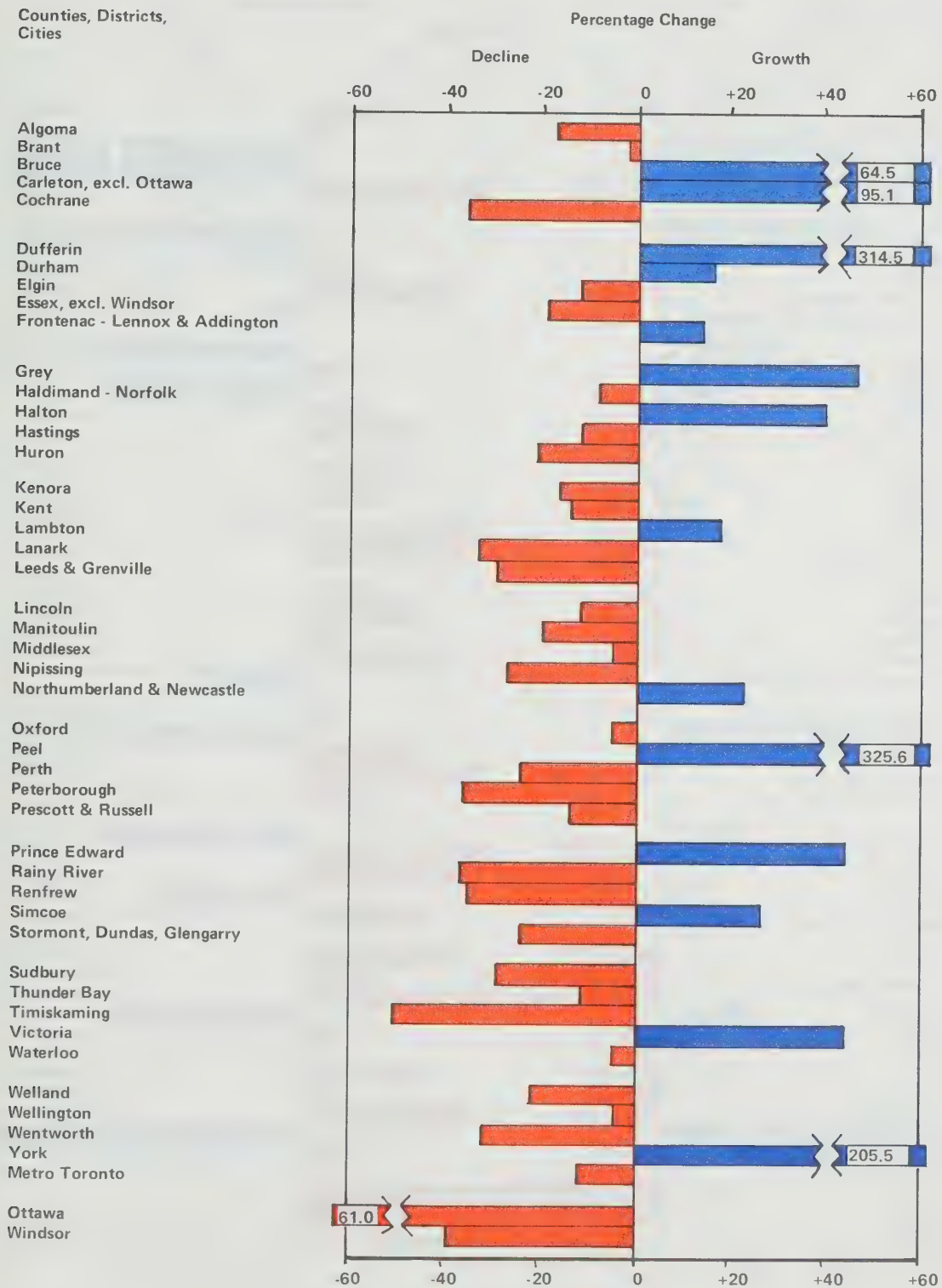


Chart 3.18

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1971-1996



76
Chart 3.19

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1971-2001

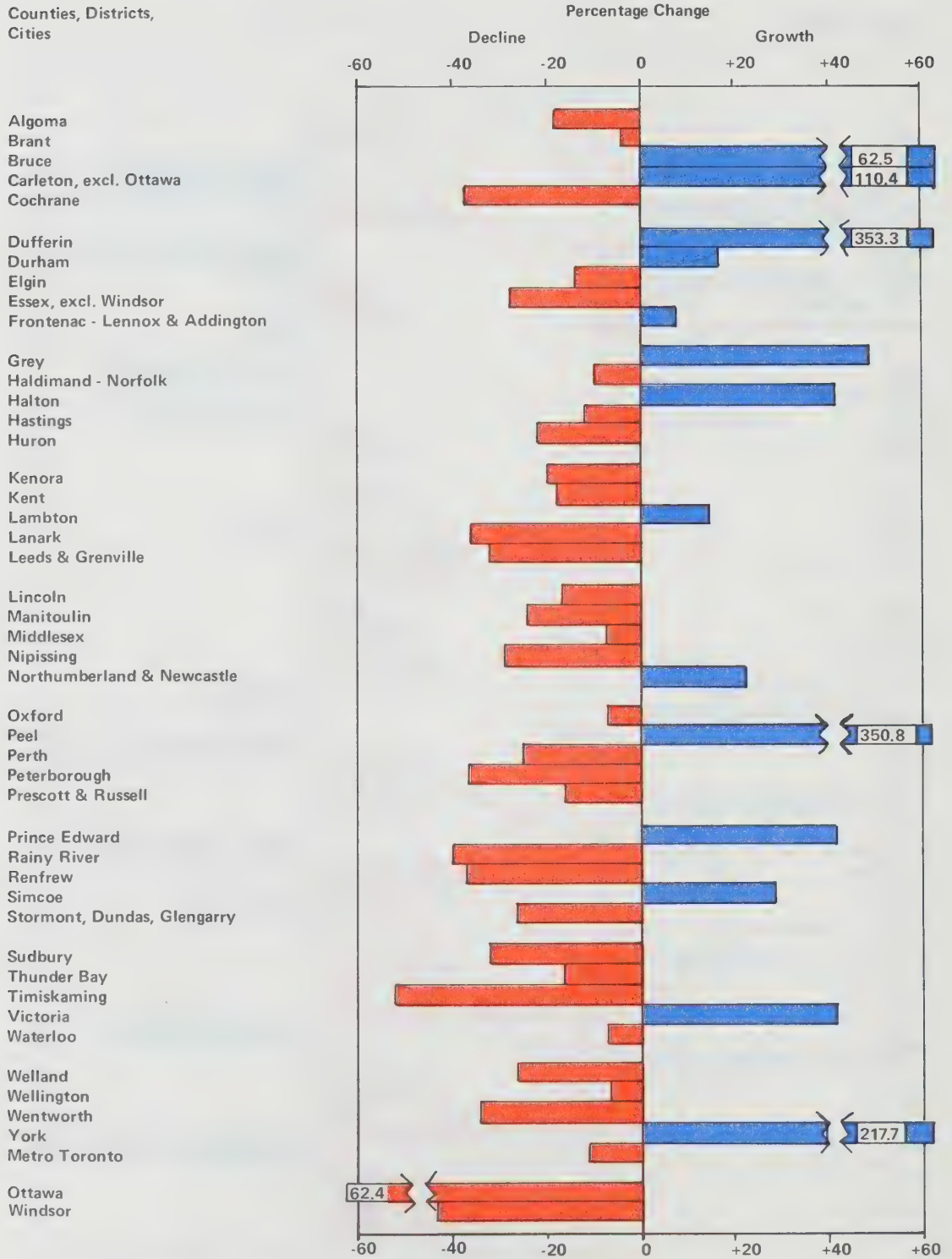


Chart 3.20

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1977-1986

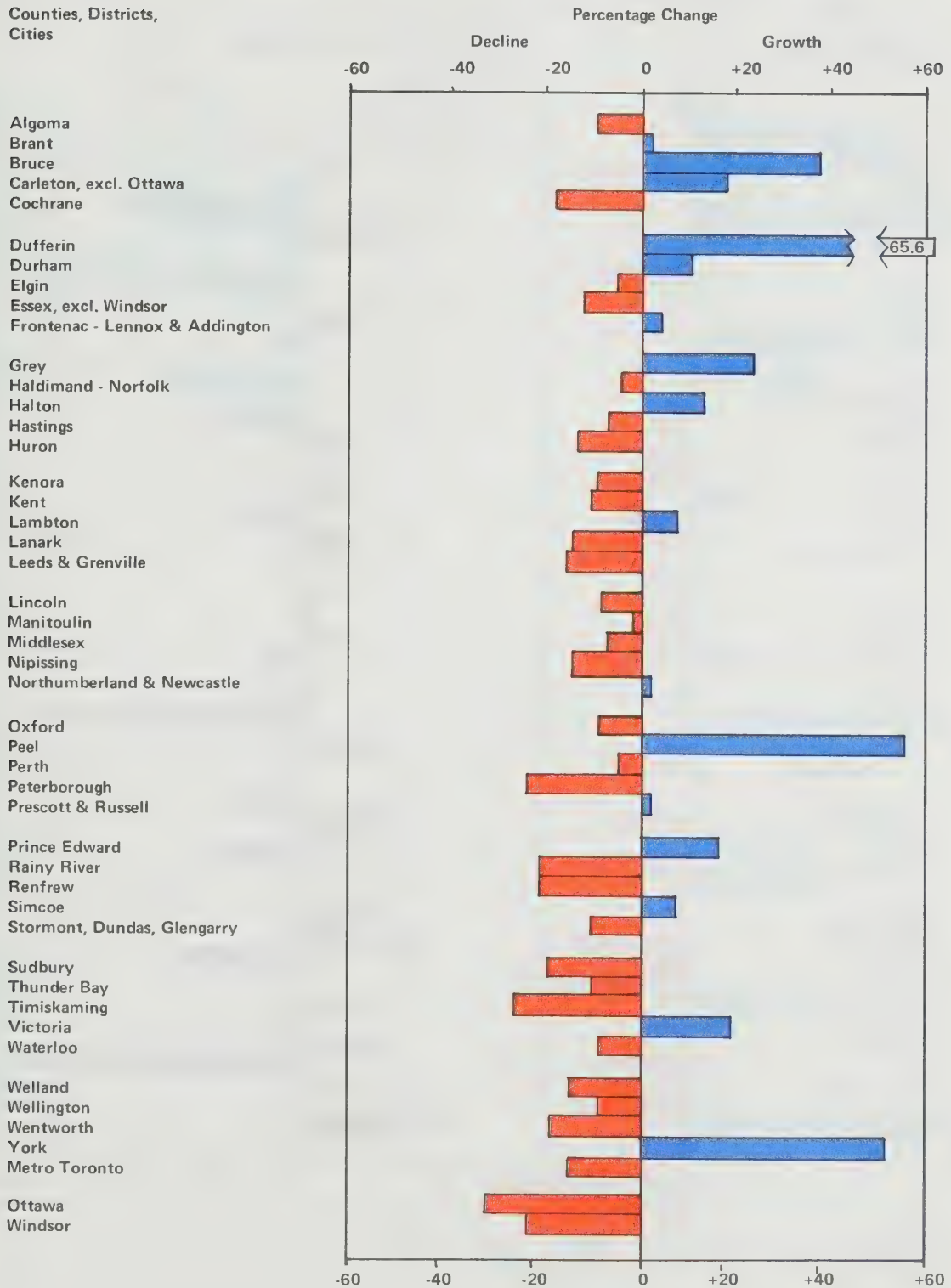


Chart 3.21

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1977-1991

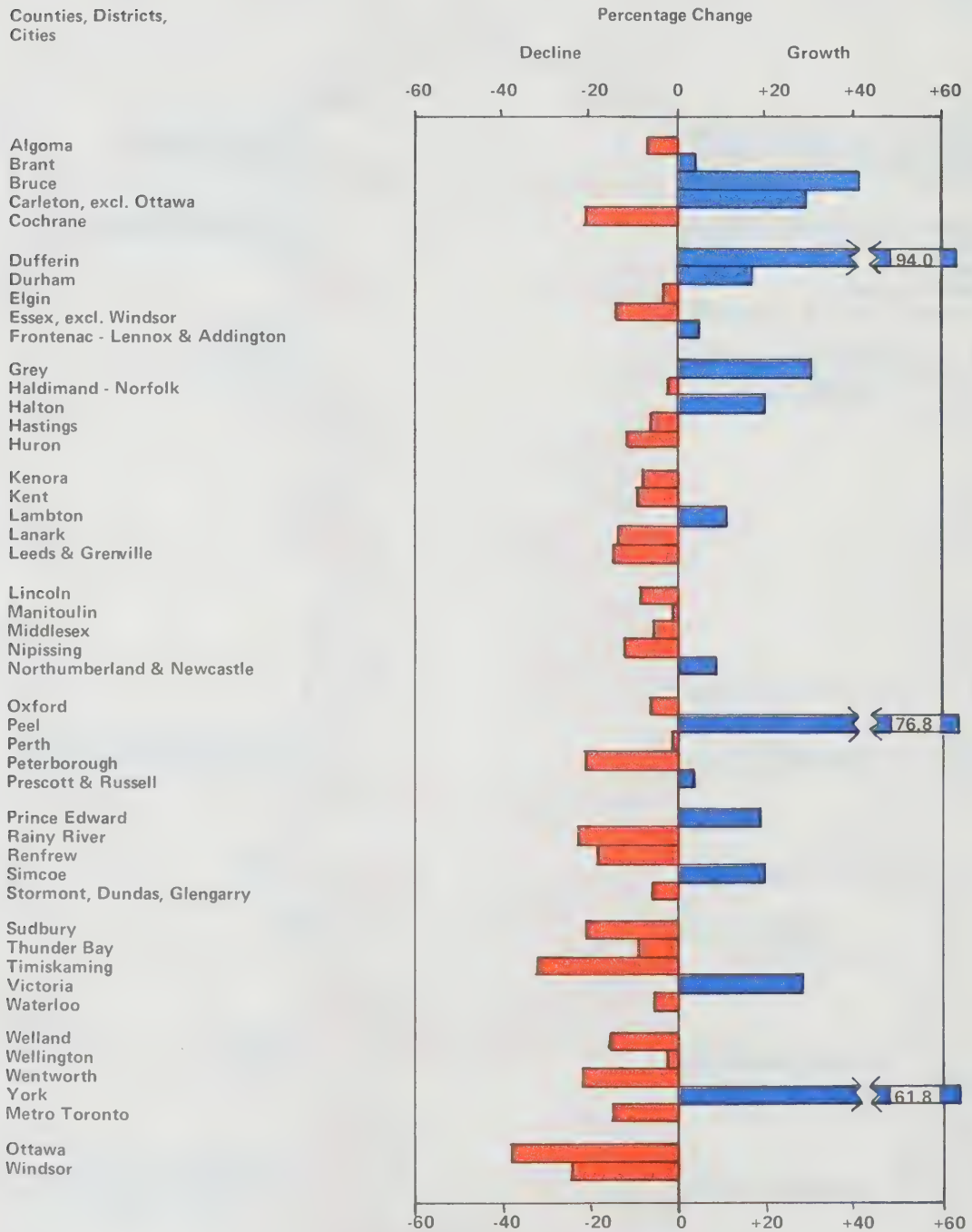


Chart 3.22

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1977-1996

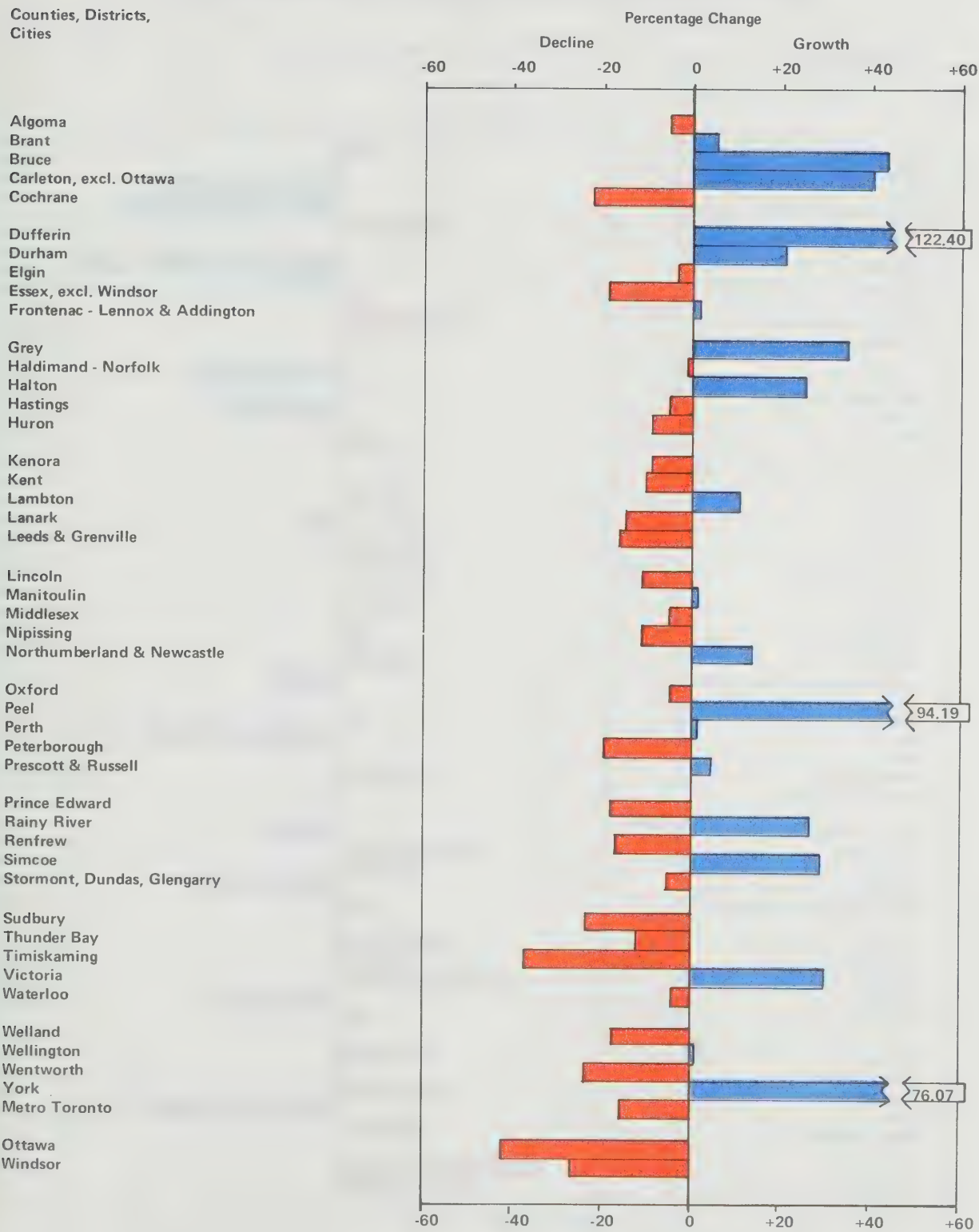


Chart 3.23

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1977-2001

Counties, Districts,
Cities

Percentage Change

Decline

Growth

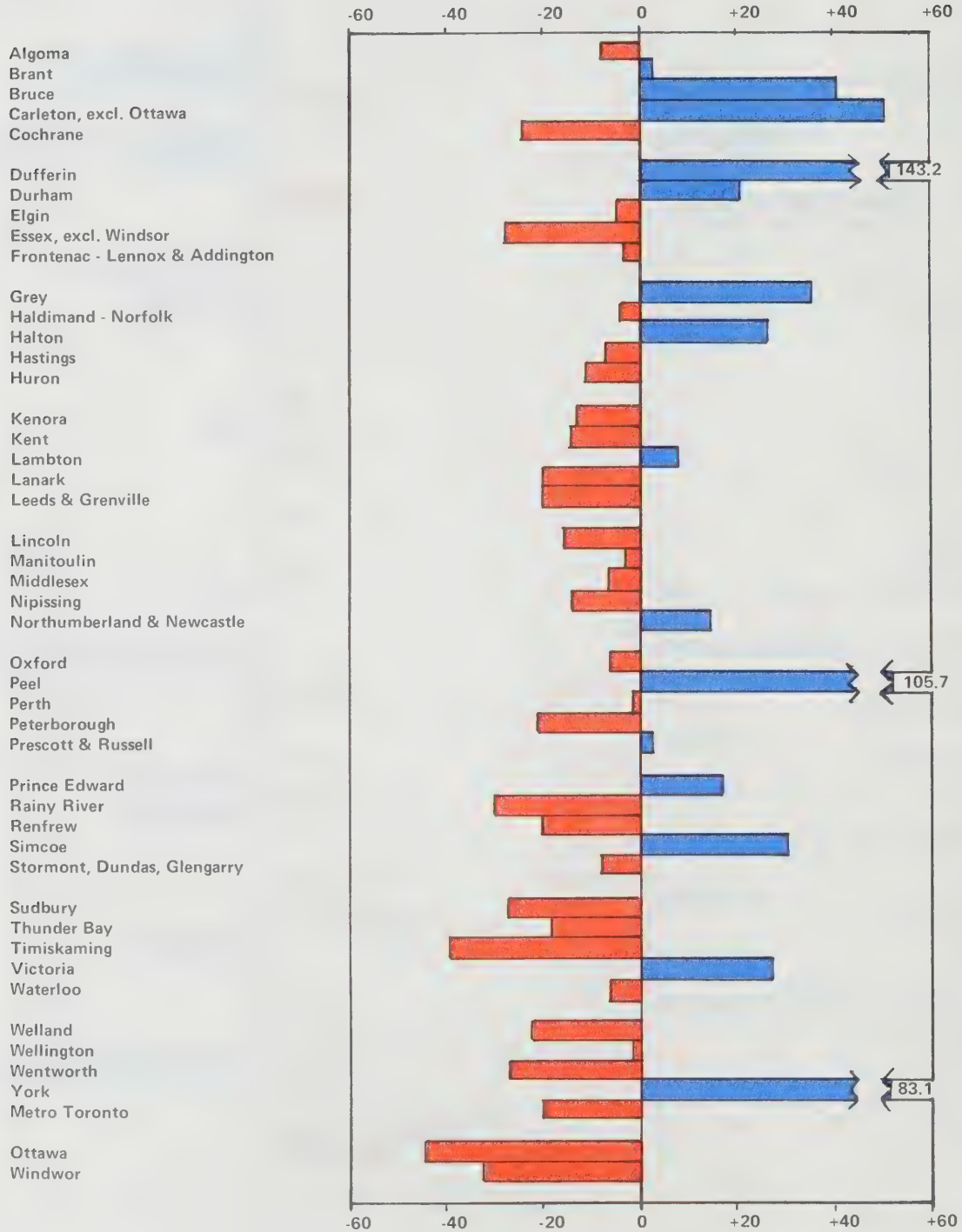


Chart 3.24

ONTARIO ROMAN CATHOLIC SEPARATE SCHOOL ENROLMENT, 1986-2001

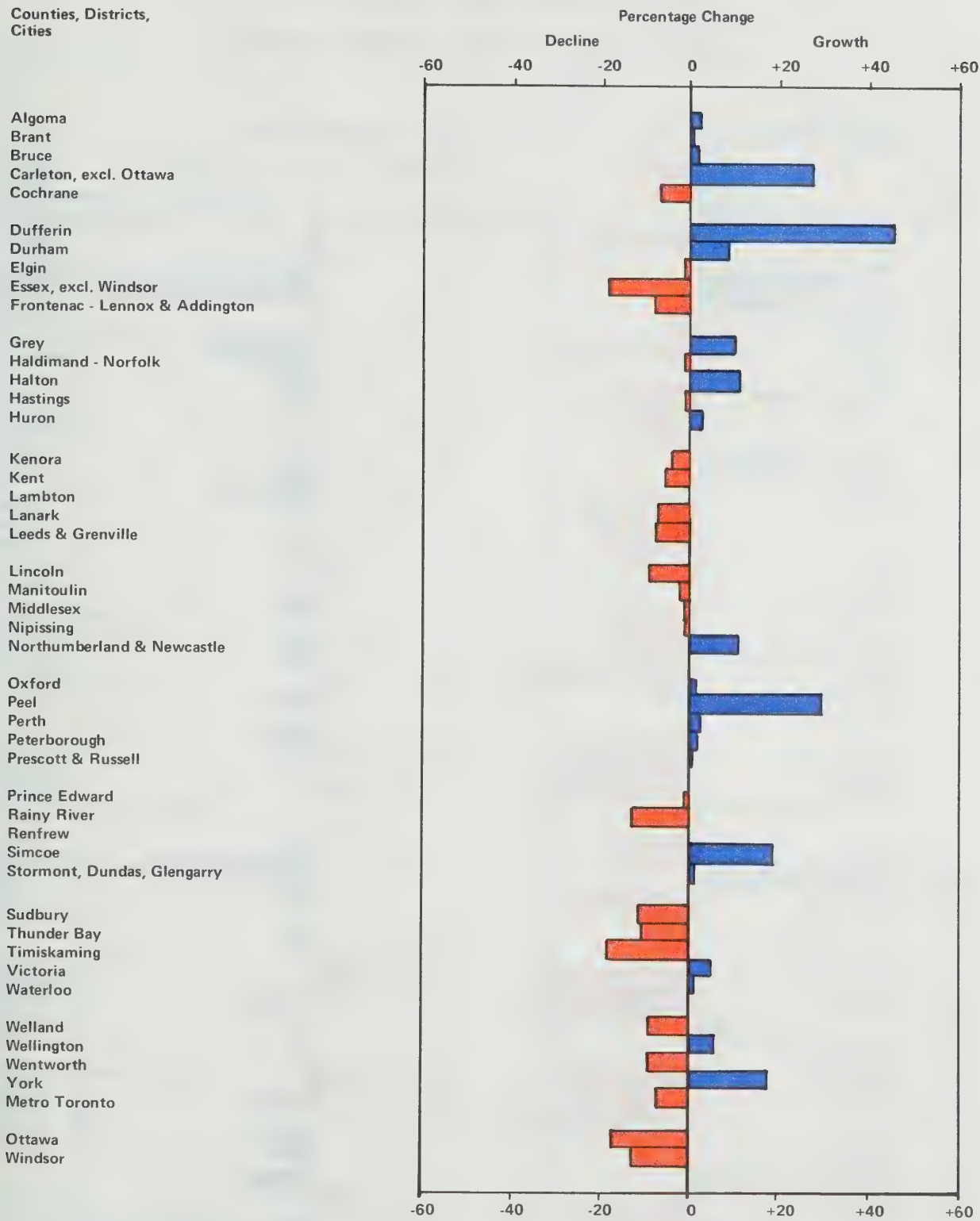


Chart 3.25

ONTARIO SECONDARY SCHOOL ENROLMENT, 1971-1977

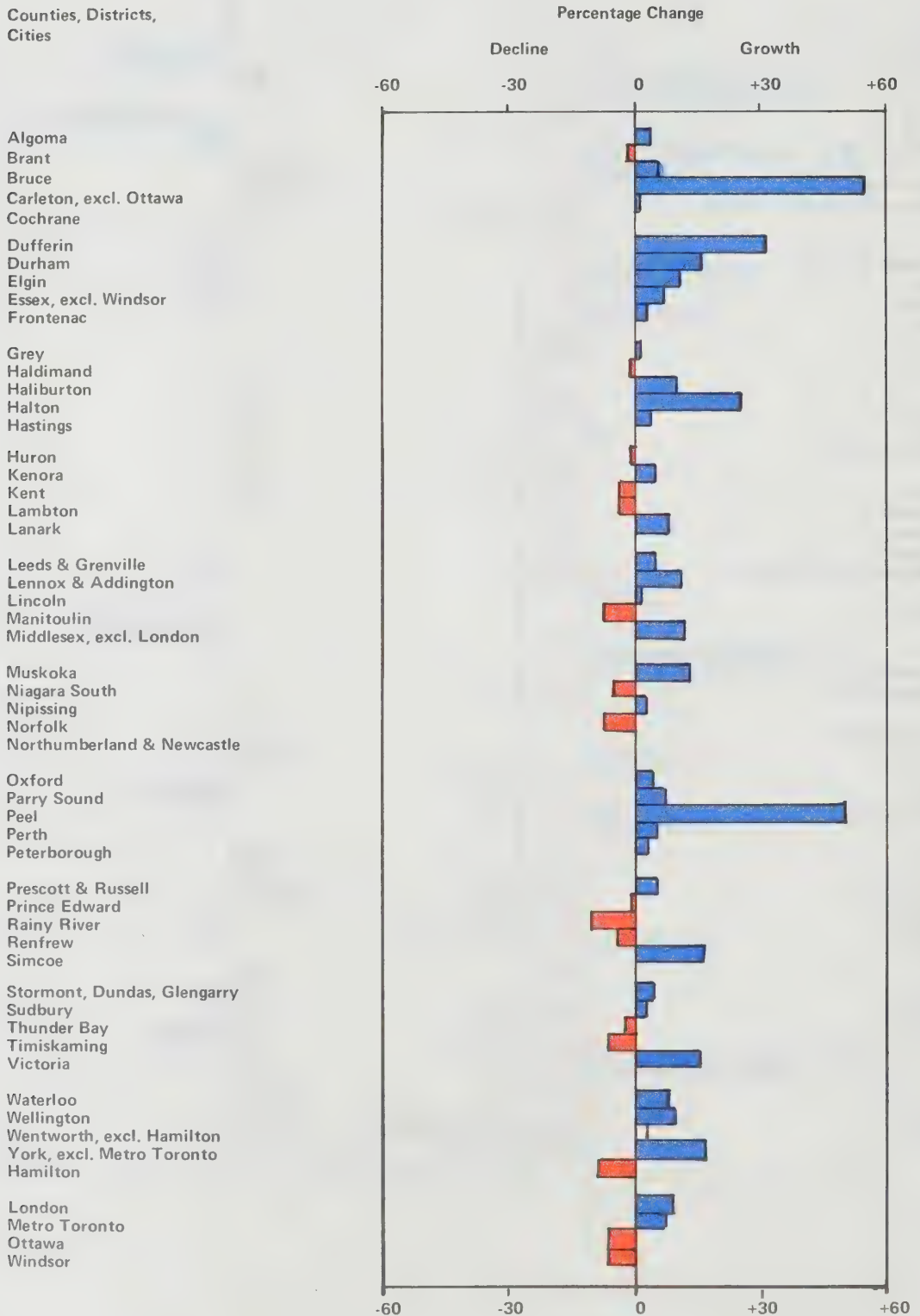


Chart 3.26

ONTARIO SECONDARY SCHOOL ENROLMENT, 1971-1986

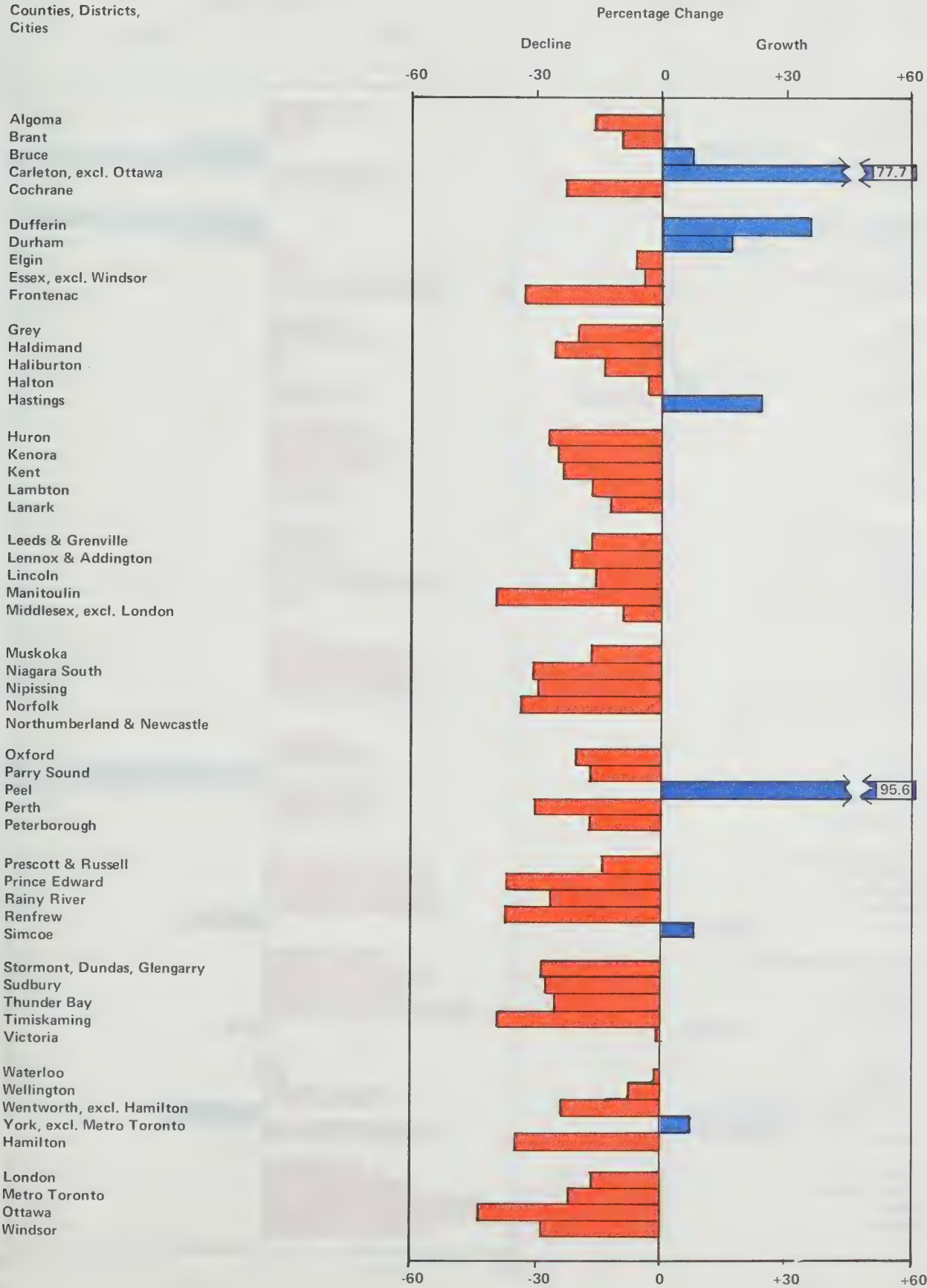


Chart 3.27

ONTARIO SECONDARY SCHOOL ENROLMENT, 1971-1991

Counties, Districts,
Cities

Percentage Change

Decline

Growth

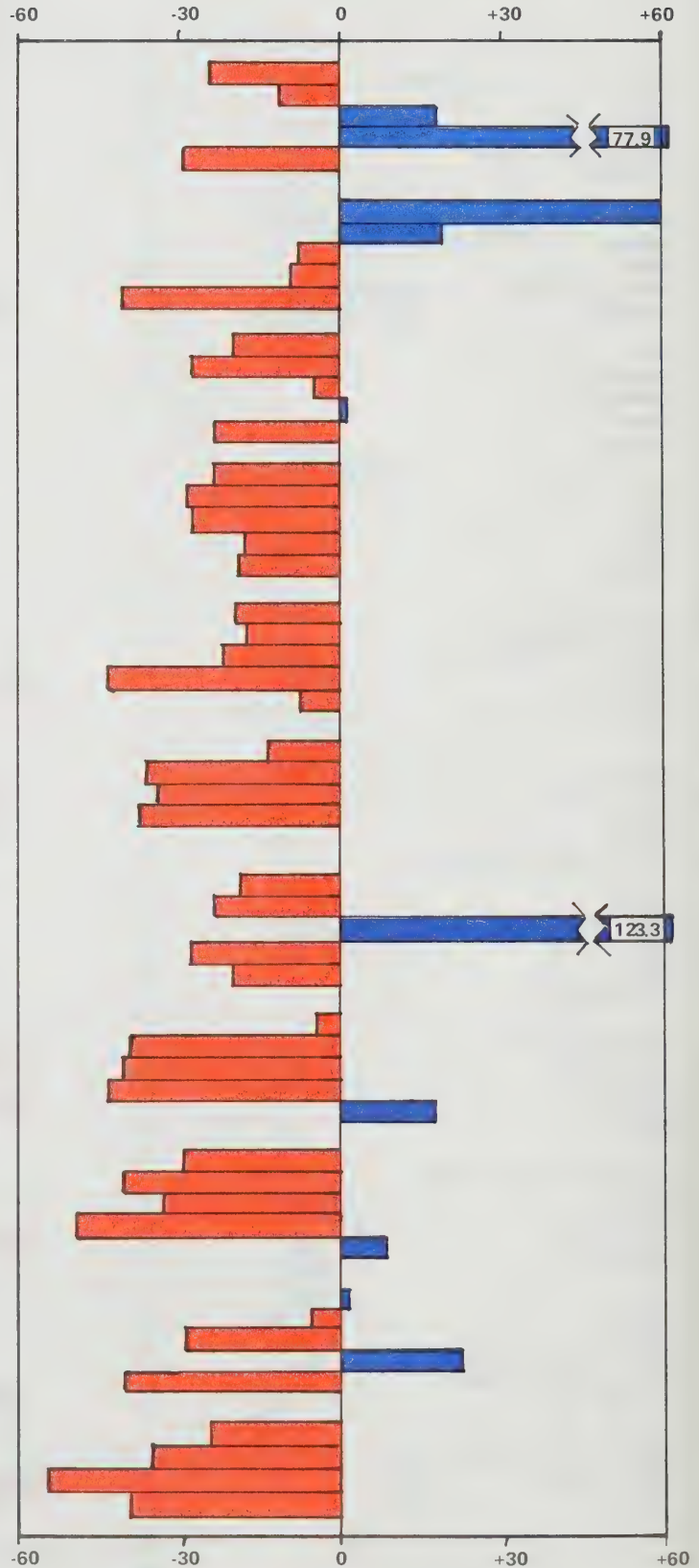


Chart 3.28

ONTARIO SECONDARY SCHOOL ENROLMENT, 1971-1996

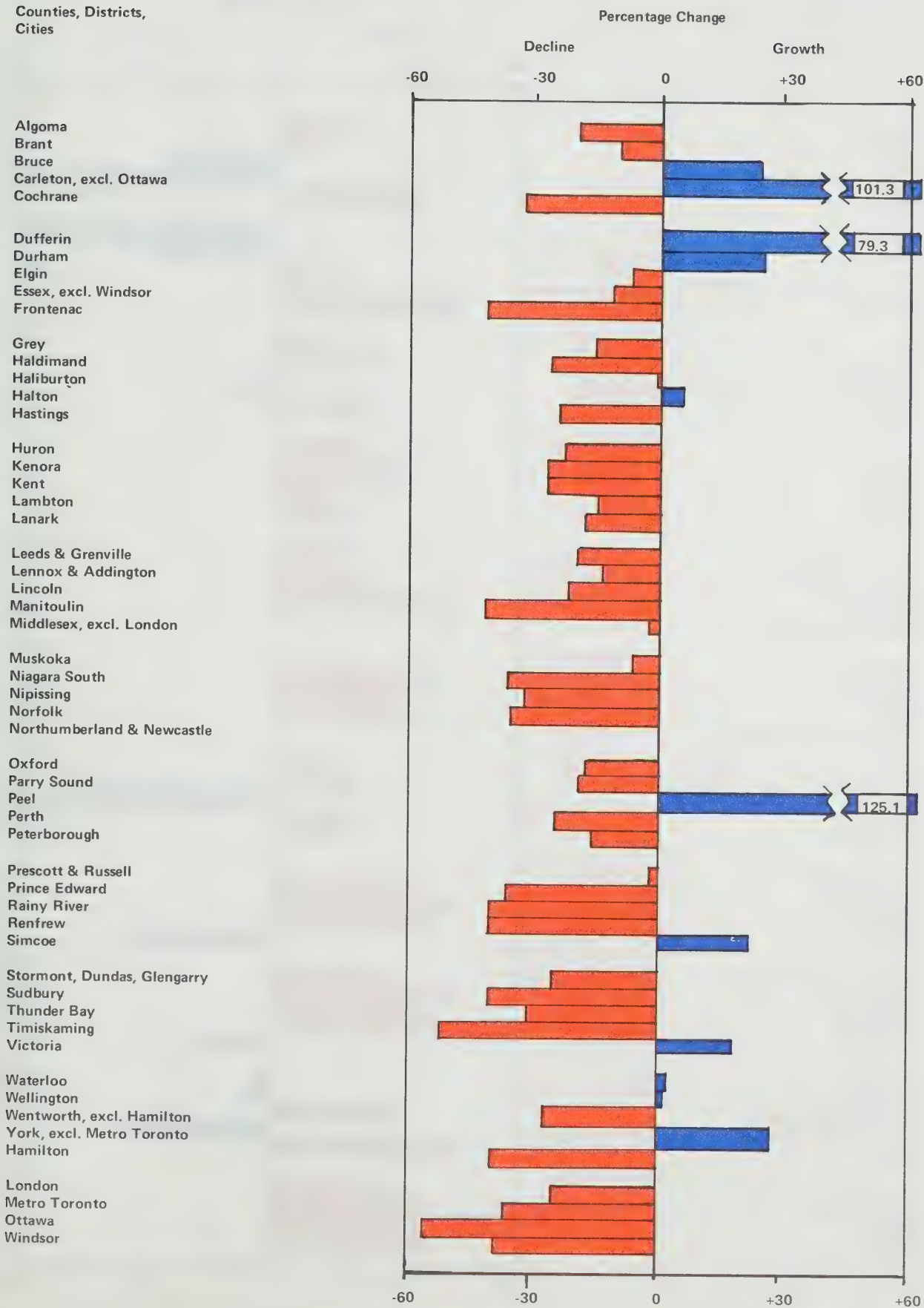


Chart 3.29

ONTARIO SECONDARY SCHOOL ENROLMENT, 1971-2001

Counties, Districts,
Cities

Percentage Change

Decline

Growth

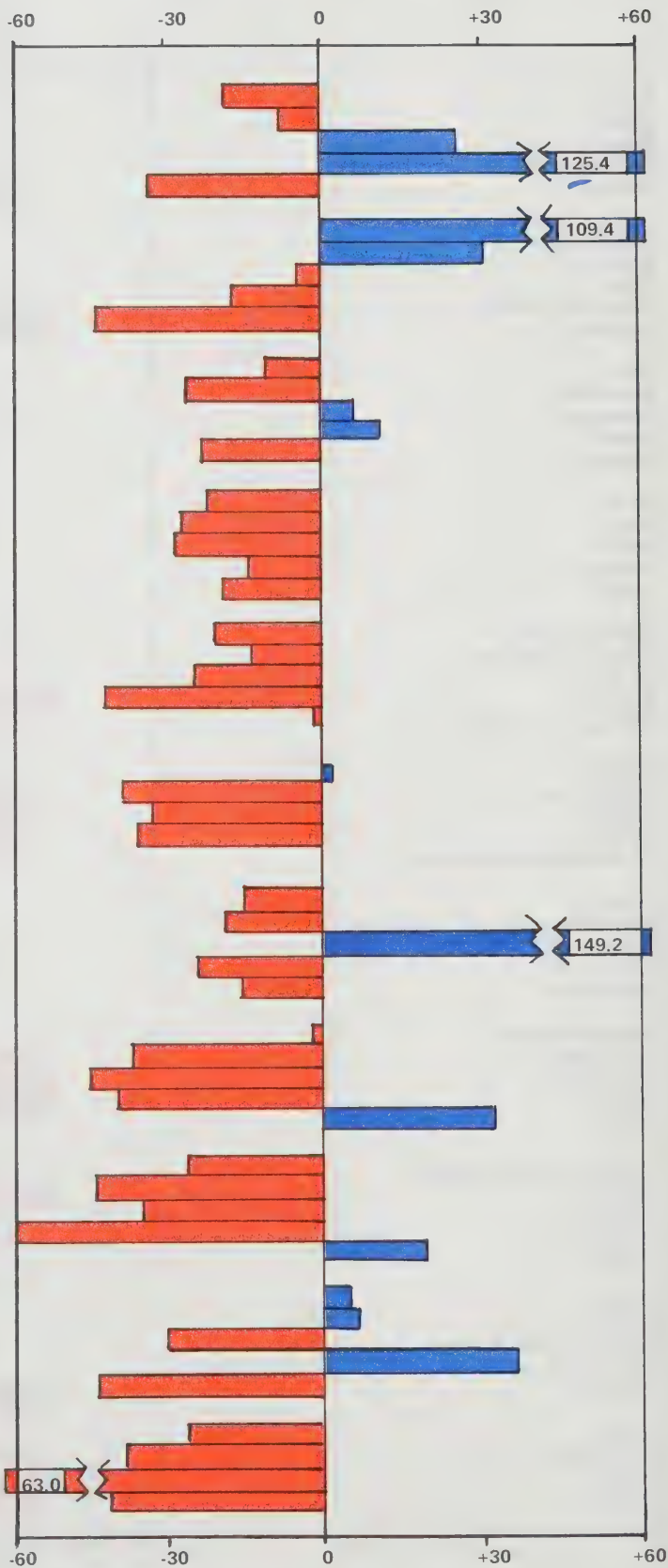


Chart 3.30

ONTARIO SECONDARY SCHOOL ENROLMENT, 1977-1986

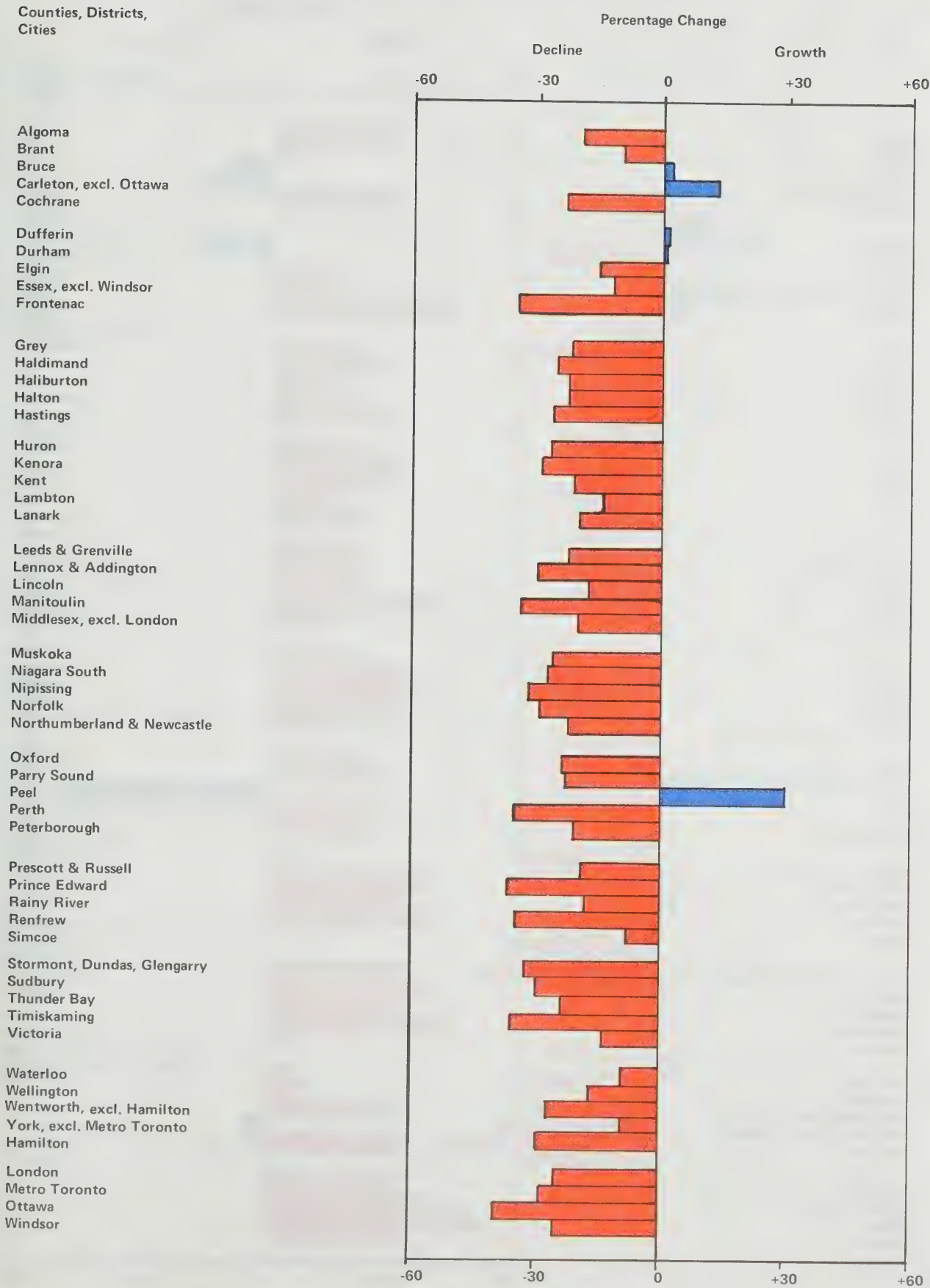


Chart 3.31

ONTARIO SECONDARY SCHOOL ENROLMENT, 1977-1991

Counties, Districts,
Cities

Percentage Change

Decline

Growth

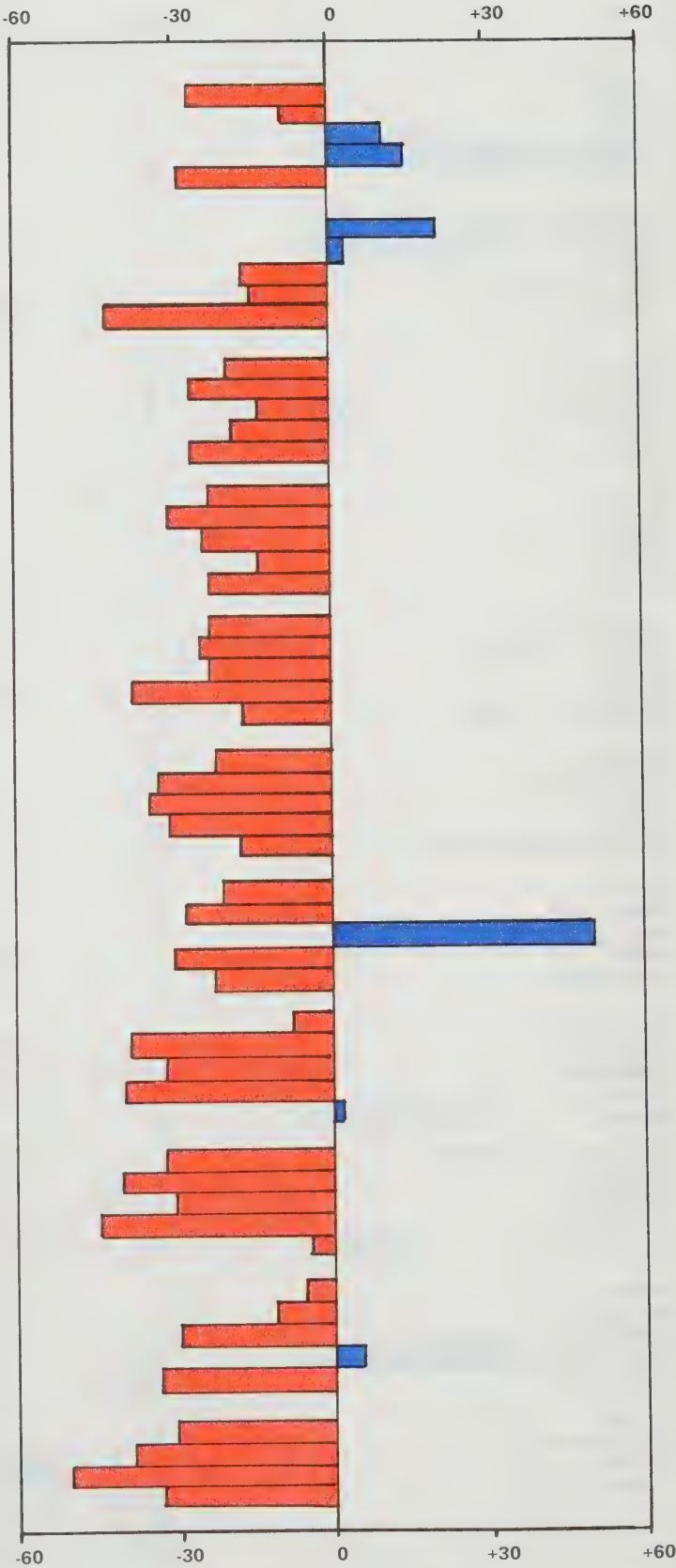


Chart 3.32

ONTARIO SECONDARY SCHOOL ENROLMENT, 1977-1996

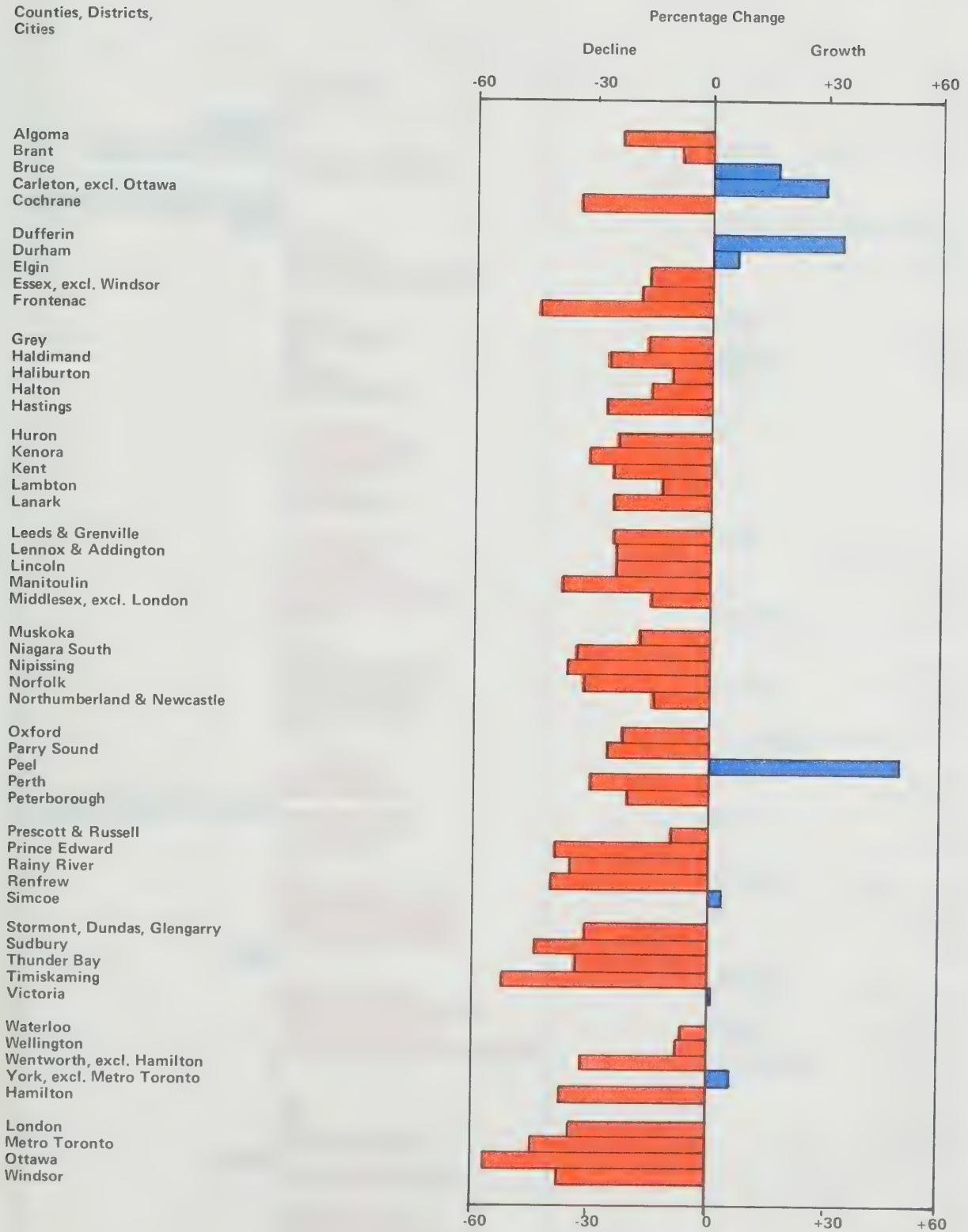


Chart 3.33

ONTARIO SECONDARY SCHOOL ENROLMENT, 1977-2001

Counties, Districts,
Cities

Percentage Change

Decline

Growth

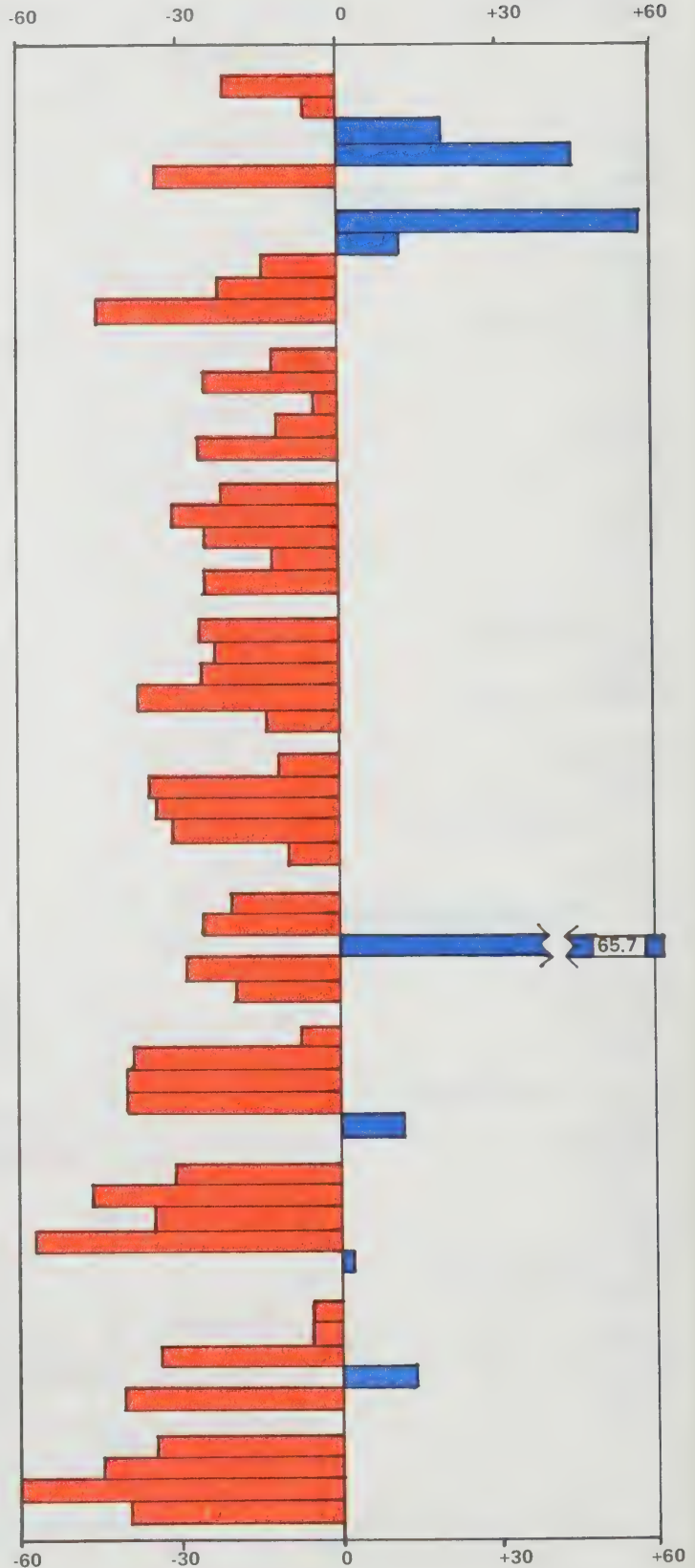
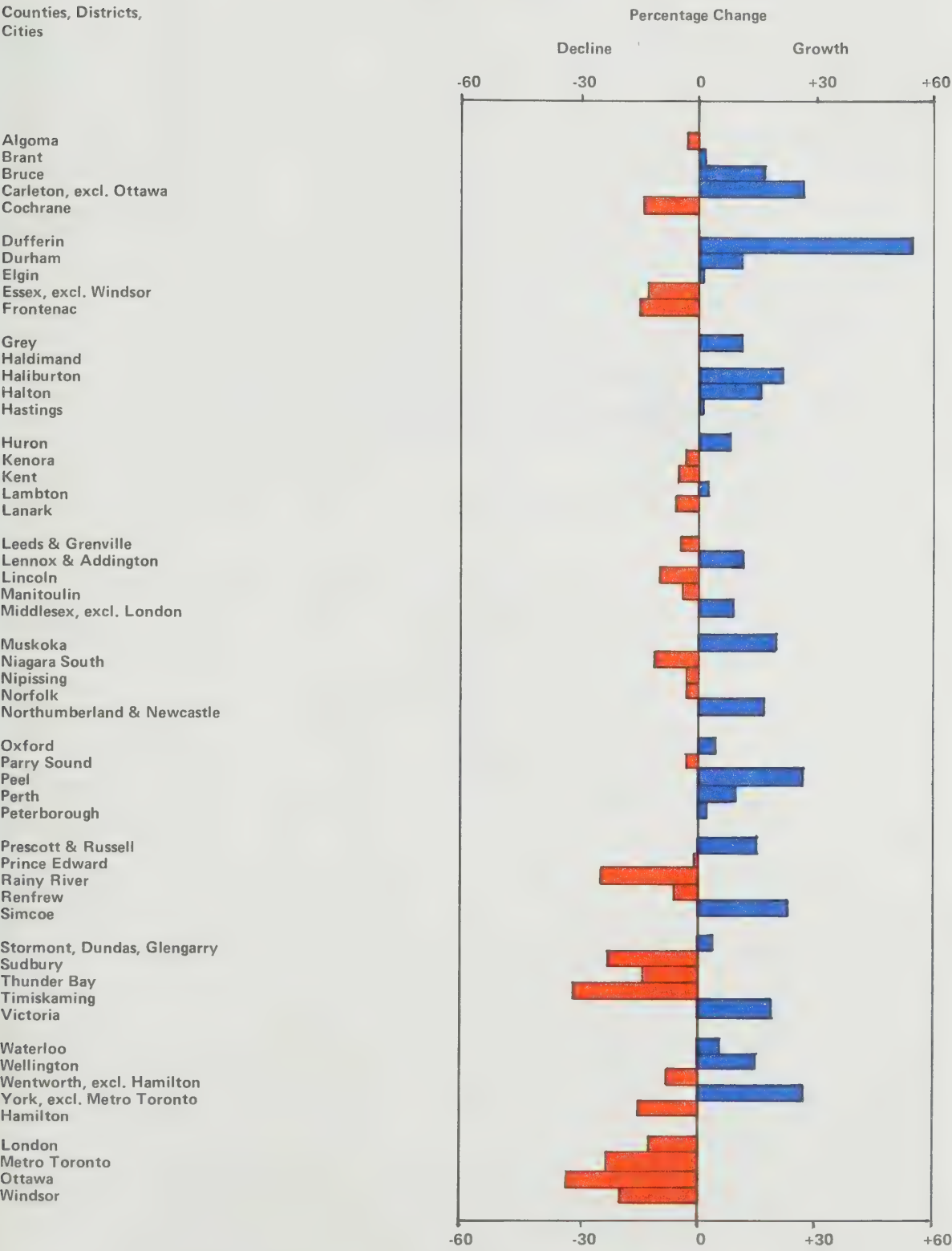


Chart 3.34

ONTARIO SECONDARY SCHOOL ENROLMENT, 1986-2001



Section II

Declining School Enrolments: Implications, Effects and Recommendations

Chapter 4

Implications of Declining School Enrolments for the School Program

Part I: The Mainstream of Public Education

I remind the reader that when I began my work a year ago I was influenced by the possible grave risk that the quality of education would be adversely affected by declining enrolments. Indeed, as recently as a few months ago I wrote in the Second Interim Report:

My early suspicions that the quality of education was being adversely affected by the consequences of declining enrolment have been strengthened by what I heard at Commission hearings and what I have read in the briefs and studies. The fear of a reduction in the range of curriculum offerings is justified. Programs such as art, music and drama have already been adversely affected at the elementary school level in some places. It is likely that at the secondary level there will be more severe effects on the wide range of programs now available to meet the needs of our diverse student bodies.

My present position is that this statement could and probably should have been qualified to some extent. It is becoming clear that given the proper conditions, and especially advance planning, reductions in the range of curriculum offerings need not be a general phenomenon affecting most schools. There is less evidence still to support a claim that any of these reductions must become permanent and cannot be remedied after some reorganization within the system.

The Commission's Curriculum Task Force was appointed to advise on curriculum matters, especially as those matters are affected by declining enrolments. Among the activities undertaken by that Task Force were two province-wide surveys. One was a questionnaire survey of boards and teachers asking for perceptions of effects of declining enrolments on programs during the last three years and of the effects that are likely to be experienced during the next five years. The other was an interview-based survey of about 90 supervisory officers with curriculum responsibilities. It solicited their opinions of the impact of declining enrolments on school programs. The results in both cases were very useful.

I have now examined as much quantitative information as is available on what goes on in the schools of the province (much of which information is finance-related) and looked at the research on curriculum and enrolment done in this province and elsewhere. I am of the view that the ambivalent results from these empirical efforts to determine the effects of enrolment changes on programs are valid presentations of the evidence to be had. The evidence corresponds to a state of affairs in the schools that I will sum up this way.

The majority of students in Ontario have not yet experienced significant deterioration of quality or variety in programs due to changing enrolment levels, nor need they necessarily do so as enrolments continue to decline if proper steps are taken. However, maintaining the level and quality of programs has meant an increased workload for many teachers and administrators. In most instances reduced programs and increased teacher work-loads can and will be remedied during a period of reorganization. During that period increased resources per student can materially alleviate conditions to the benefit of students and teachers. Only in some small number of boards and schools will the deterioration of programs not be amenable to repair by reorganization.

The most obvious negative effects of declining enrolments on programs are complications in the day-to-day operations of the schools. These are logistic problems of mobilizing the proper numbers of teachers and other personnel with the particular specializations we have identified as appropriate for the classroom experiences and services we want children to have, of organizing students into appropriately constituted classes in large enough numbers to be taught (and otherwise served) at unit costs we consider tolerable, and of complementing teachers and other personnel with the supplies and facilities conventionally associated with the schooling process in our system. These are manifestations of the same problems we refer to as economies-of-scale problems when speaking of school finance. When a school or a board cannot continue to deliver a constant quality of education to a reducing enrolment without increasing unit costs, it faces the consequences of economies-of-scale problems. More specifically, it faces the diseconomies of a reducing scale of operations.

This raises a question of tremendous importance to the strategy of implementing education policy. Are most of the quality of education

problems (or economy-of-scale problems) associated with declining enrolments short-lived, long-lived or permanent? I have chosen to consider problems enduring for 3 years or less as short-lived, problems enduring for more than 3 years but with a predictable end as long lived, and problems that will clearly endure for more than 3 years and with no predictable end as permanent. I am sorry to report that no one has a definitive statement to make on this question. Some judgemental decisions are called for.

Of the great body of literature related to economies-of-scale in education, only a small portion has been done for Ontario school operations. However, the general congruity between the work done here and elsewhere suggests that we would not be much better served by a greater amount of it. This literature (that pertaining to Ontario and that from other jurisdictions) is helpful to one who must make the judgements. I have been influenced by the work of two people in particular. The first is that of E. Brock Rideout (Department of Educational Administration, Ontario Institute for Studies in Education) dealing with "critical size," or the size of schools below which costs-per-pupil are especially sensitive to enrolment variation (see, for example, E.B. Rideout, The Effect of Elementary School Size on Operating Cost Per Pupil, a report on research done for the Ministry of Education, Ontario and presented to the Ontario Education Research Conference, December 3, 1977). The second is the work of Donald A. Dawson (Department of Economics, McMaster University, and formerly with Ontario Economic Council) dealing with economies-of-scale in school systems as a more general phenomenon (see, for example, D.A. Dawson, Economies of Scale and Cost-Quality Relationships in Elementary and Secondary Schools: A Survey, Working Paper No. 4, Commission on Declining School Enrolments in Ontario, 1978). It should not be inferred, however, that Rideout's or Dawson's judgements would necessarily agree with mine, or that other readers would be influenced in their judgements by these writers the same way I have been.¹

In my judgement, the greater part of the declining-enrolment-education-quality problems (or declining-enrolment-unit-costs problems)

¹Readers should also study the reports prepared for this Commission by Dr. R.C. Kumar, as part of the series of mini studies (#3 and #10), which focus directly on the problems of declining enrolment at the board level.

are short-lived. They are organizational problems, very challenging ones indeed to our administrators, but they will normally be dealt with in short order and the rest within 3 years. (Of course, for those boards which will have lower enrolments every year for a decade or more, it should be recognized that the pressures on administrators will continue throughout that time and beyond.) A smaller part of the problems will be long-lived. They will pertain mainly to the use of long-lived assets (real estate for the most part) effectively and economically and to the search for satisfactory solutions to the economic, political and social problems of increased dependence upon busing. Only a very few problems will be permanent. They are, in effect, the ones not amenable to reorganization of systems, or the ones our administrators will not handle to our satisfaction, not in 3 years, and probably not in 30. In the main they will pertain to a few small boards in very sparsely settled parts of the province and to a small number of schools in sparsely populated or isolated parts of even large boards. The increasing unit costs, or the program quality deteriorations associated with declining enrolments in these cases will not be dealt with to our satisfaction by closing classrooms, closing or combining schools or more busing. Operations in these cases will be permanently characterized by inadequate programs or by the consumption of more than the average amounts of resources per student.

So, in effect, I do not regard the organizational-administrative problems associated with declining school enrolments as a threat to school programs which cannot be overcome. Such organizational problems can not only be dealt with, they are being dealt with. Doing so does take time, though, and to protect pupils who are enduring the periods of reorganization, some "extra" resources, or higher-than-ordinary unit costs are called for. (The recommendation pertaining to this is in Chapter 10, p. 300.)

I am somewhat more impressed by the seriousness of what the members of the Curriculum Task Force (as well as many persons giving briefs or making presentations to the Commission) refer to as a threat emanating from declining enrolments to "the philosophy of the Ontario curriculum".

That "philosophy" (perhaps "character" would be as suitable a word), when viewed historically, may be described as having three salient components: (1) decentralization of and sharing in decision-making, (2) equality of opportunity for all students and (3) a high degree of freedom of choice for students among a variety of curriculum options. I believe we must acknowledge some risks to them. The risks will be somewhat less if we are conscious of them.

If we think of those three components of our curriculum philosophy as policy objectives, we have to concede that they are sometimes competitive, i.e., there are times when, as we serve one objective more, we must serve another objective less. No doubt we could facilitate the equality of opportunity somewhat by centralizing our system of education and constraining students' curriculum choices. On the other hand we could promote decentralization and students' choices by de-emphasizing equality of opportunity. As the total resources going to most school boards are reduced along with declining enrolments (whether or not that reduction is proportionate to the enrolment decreases), there will have to be some changes in patterns of expenditure as well as levels of expenditure. In some cases hard decisions will have to be made by a board when it is forced to choose one of the following three alternatives: (1) a reduction in its commitment to the development of curriculum (in particular the activity of designing, in accord with Ministry of Education guidelines, courses of study and curriculum materials most suitable to local conditions), (2) the allowance of some compromise in its desired standards of direct education services to students (perhaps an increased pupil-teacher ratio) and (3) a reduction in the range of curriculum choices offered to students.

It must be emphasized that these are legitimate policy choices that some boards face, and the number of boards which have to make such choices will increase with declining enrolments. The policy choices made will be determined politically. For a board to sacrifice in the service of one policy objective in order to increase or maintain the effort related to another one, however, is not necessarily to abandon or change its goals, values or philosophy.

Large boards, especially those with high taxable-assessment per pupil ratios, have always had some advantage in terms of the resources they could commit to program design and curriculum materials development. Some boards will now find their capacities to spend on these activities reduced to what previously were the capacities of boards smaller than them. In order to increase the effectiveness of whatever expenditure on program development a board has, I offer these two closely related recommendations.

School boards increase their cooperation with each other in the design of programs and development of curriculum materials. Regional officials of the Ministry of Education be instructed to provide their services in promoting and coordinating this cooperation on a regional basis and in some cases on an inter-regional basis.

The Ministry of Education establish a team of Ministry and seconded external specialists to advise and assist boards and groups of boards in program planning and development work. Establish that access to the advisory team be through regional officials of the Ministry; the advisory team become operational only after a training program of three months; and the training program be a cooperative effort of the Ministry of Education, the Ontario Teachers' Federation, the Ontario Association of Educational Administrative Officials, university faculties of education and the boards.

The effectiveness of such an advisory team, or of any other tactic to encourage board-level autonomy in program design, will depend upon the Ministry emphasizing, both in its curriculum guidelines and in their rationales, that local participation in decision-making remains an essential part of our system of school programs development. The advisory team should understand clearly that its role is to complement and promote the efficiency of local curriculum planning efforts, not to substitute for them.

Our concern for equality of education opportunity demands that we move decisively to protect students in schools of boards where programs are eroding as a consequence of declining enrolments, notwithstanding my comments above that this is not and likely will not be a general problem. There have always been some "marginal schools," those operating at a scale barely adequate to maintain an acceptable program. The

number of these will increase (though we are still talking about exceptional cases and a small portion of our student population). In the interest of serving this aspect of what I above called our curriculum philosophy, and in the interest of students in the marginal schools, I repeat this recommendation from the Second Interim Report.

The Ministry of Education take steps immediately to determine whether all schools throughout the province have the required program, i.e., the minimum set of educational offerings specified by provincial policy. If necessary, redirect the Ministry's monitoring process to this activity.

I am aware that some Ministry officials believe this to be a recommendation that the Ministry do what it is doing. To some extent that assessment of the recommendation is warranted. Nevertheless, the recommendation stands and is repeated here. Quite frankly, I am required to do so, despite the criticisms, because of what I have read in the briefs and listened to at the hearings. Moreover, the Ministry would be well advised to increase its efforts significantly and visibly in this direction if only to satisfy itself that my claim is correct that there will be only a small number of schools with programs affected negatively by declining enrolments.

A Foundations Program

Having said, in effect, that the people of this province must be assured that every school offers the minimum set of educational offerings specified by provincial policy, I have no choice but to offer some statements about what the core or foundations program for our schools can and should be.

Our schools have become very diverse in their cultural compositions. In addition, the schools probably serve a greater range of ability or readiness-for-learning than formerly, and certainly we are more sensitive to these variations than formerly. In responding to the varied populations our schools serve, our tendency has been to identify "new needs" and to insert some corresponding "curriculum component" into our school programs.

The result has been the evolution of a curriculum with some obvious strengths and weaknesses. It is rich and diverse and it provides opportunities corresponding to a wide range of interests, orientations and abilities. On the other hand, it is far from clear what its hierarchy of objectives is and for this reason it is often faulted for lacking a sense of direction, and for not taking care of "the basics".

I am not endorsing any of the current "back to basics" movements, at least not as I perceive them to be. But I claim that the policy-makers of any publicly-supported school system who do not attempt to understand and respond to what appears to be a common refrain coming from many back-to-basics spokesmen are lacking in political perspicacity.

It is not likely that as we go into a period of declining enrolments which will almost certainly result in the reduction of total (not necessarily per pupil) resources going to education, and into a period of increasing competitiveness among service areas in the public sector, we will be able to improve the curriculum or recognize new needs by adding to the school programs we have. Changes will generally necessitate the sacrifice of something already in the curriculum to accommodate something new. Under such conditions we need some agreement on what programs all schools in the province will be expected to have and to keep, even while they make changes.

The merits of a foundations program, as I see them, are these:

1. It is essential to the promotion of equality of educational opportunity.
2. It provides a reference to guide boards in constructing their own priority of program offerings when resource constraints require some reductions.
3. It offers the embodiment of whatever we are able to agree upon as the social vision or shared image of our schools and what they do. (I do not see that this precludes a continued, healthy competition among special interest groups for curriculum recognition.)
4. It reduces the danger that our respect for and appreciation of diversity will become a pursuit of diversity for its own sake. In this regard it is a reminder that not all life-styles can or should be reflected in the curriculum and that not all school environments are equally supportive of learning.

5. It presents a clear statement of what is expected from the schools and makes accountability at all levels of the school system possible.

I know that "the minimum set of educational offerings specified by provincial policy" that I have referred to have not, in fact, been specified completely. What we have to date are a number of moves in this direction, such as the identification of certain mandatory offerings as prescribed in the Ministry of Education Circular P1J1, The Formative Years. To expedite and consolidate these efforts, I offer this recommendation.

A kindergarten to grade 13 foundation program for Ontario schools be developed and publicly tested by the Ministry of Education.

Social Policy and School Programs

It is no doubt true that schools mirror the societies they serve and for most of us it follows that the curriculum of the schools should evolve along with societal concerns, perceptions and interests. For some it also follows that the purpose of public schools is social reform and the curriculum of the schools, they believe, should be designed to deal with current social problems or issues. This view of schools as instruments of reform and social service was at the heart of many suggestions received by this Commission through the briefs and hearings.

I have received countless suggestions for recommendations to turn the school system into an agency of public health, a service for the aged and a general community service. I am sure that my very conservative recommendations on the structure of the school system (meaning its missions and relationships to other agencies of government and community) will be a disappointment to many enthusiasts for "reform through the schools".

I believe, however, that anyone who examines closely the legal mandate of the school boards and their sources of financial support will temper his plans for expanding rapidly the social-service role of the schools. If he also considers the specialized nature of the services

traditionally offered by the schools and then considers the "division of labour" that exists between the boards and the municipalities, and between the Ministry of Education and other Ministries, little indeed will be left of his plans for expanding the social reform or even social service role of the schools. The complexities of reorganizing school systems to accommodate new enrolment levels, plus the reduction in total resources available to school boards with declining enrolments, will convince most people that this is certainly not the most opportune time to make serious recommendations for expanding the social service roles of the schools. In any case, this topic does not fit comfortably in a discussion of curriculum. For a more complete discussion of the service role of the schools, I refer my readers to Chapter I, Section B of the Second Interim Report.

However, in this discussion of school programs there is one important aspect of the changing societal role of our publicly-supported schools that should be mentioned -- continuing or adult education. I noted in the Second Interim Report that I believe the continuing education activities of the boards will increase, independently of any recommendation by this or any other Commission, and perhaps independently of provincial policy.

There is some evidence that the proportion of the age group that traditionally attends secondary schools has ceased to increase in recent years. I assume that in most cases when young people leave secondary school before graduation it is for good reasons. I do not intend to recommend raising the legal school leaving age. I also do not intend to recommend a hard-sell campaign against "dropping out". But because the valid reasons a person has for leaving school at age 16 or 17 do not necessarily preclude his returning at some other age, and because I do not believe we are yet ready to see an end to the historic advancement of the average attainment level at which people leave the schools, I make the following recommendation.

The Ministry of Education and the Ministry of Colleges and Universities make coordinated statements of their policies on the training of increasing numbers of adults with incomplete secondary school educations. These statements should clarify for the secondary schools the amount

of initiative they should take in "recruiting" adult students and recent school leavers, both for full-time and part-time study, in academic and vocational areas, and the legislative grant consequences of their behaviour.

Provincial policy in this regard need not be fixed for any long period of time. One intention of this recommendation is to help clarify the role of secondary schools vis a vis the Colleges of Applied Arts and Technology (CAATs) in the matter of apprenticeship training. Efficiency suggests that provincial policy regarding the roles of the CAATs and of the secondary schools in adult completion of secondary school and in apprenticeship training be determined in part by periodic studies of relative costs in the two systems.

There remains one other point to be made about social policy and the school programs. How are new perceptions of social realities and the political endorsement of them to be accommodated in the curriculum? For example, our schools are under pressure, some of it in the form of express public policy, to re-examine the exposure given in schools to particular ideas and attitudes about race and sex. It is obvious that such self-examination requires resources, and attendant efforts to change what the schools do in the way of affecting student perceptions in these regards will require even more resources. At the board level and the school level such activities are going on all the time. They are among the tasks local authorities undertake with the resources they commit to program development. If the Ministry of Education or the Cabinet want to speed up or affect the direction of these developments, the course of action open to them is clear. Special additional funds can be allocated to cover in full the costs of the required or suggested developmental and reorganizational activities.

Learning Materials

Under conditions of declining enrolment, or more correctly under the financial constraints that will characterize our adjusting to new levels of enrolment, efforts to improve the effectiveness of learning materials and the efficiency in the development and production of them are called for.

In the First Interim Report various practices used in Ontario for the commercial development of curriculum materials were identified. Since then, a study done for the Commission describing such practices in other countries has been completed.¹ It pays special attention to the role in several countries of curriculum materials development centres. The essential characteristic of these centres is joint collaboration of publishers, academics, school people and government officials in the development and testing of materials. We had years of similar successful experience in the former Ontario Curriculum Institute. It is the apparent satisfaction with these centres, with knowledge of efforts to initiate such centres in Canada and in light of our own experience that I offer this recommendation:

The Minister of Education, in consultation with interested parties, plan for the establishment, on an experimental basis, of one or more curriculum materials development centres, or for the subsidization of, and participation in, an existing centre.

Correspondence Education

Ontario has a highly developed and successful program of correspondence education. It is appropriate at this time that some attention be given to expanding application of these activities, in particular as a complement to the teaching activities in schools in which enrolments are too small to allow the varieties of courses normally expected in the schools of this province. High quality correspondence courses deserve serious consideration as an alternative to the closing of schools due to reduced program offerings. The importance of correspondence education will be increased by declining enrolment.

¹J. Kormos, Educators' and Publishers' Perceptions of Quality Curriculum and Instructional Materials During Declining School Enrolments, paper prepared for the Commission on Declining School Enrolments in Ontario, 1978.

Part II: The Exceptional Aspects of the Public Education System

Native Peoples

Having made much of declining fertility and birth rates as the phenomenon behind declining enrolments, I must point to the case of the Native Peoples in Ontario as clearly qualifying as an exception. Whatever the problems associated with the provision of education services for them, they are not problems of accommodating to declining enrolments.

During the past two years there has been an increase in the number of tripartite agreements, involving the federal government, the bands and public school boards providing for education by the boards of children of Native Peoples. To my knowledge nine boards have now signed such agreements. It is sometimes claimed that the willingness of the boards to be a party to these agreements is in some measure due to declining enrolments of students of non-Native Peoples. However, there are more important relationships between this phenomenon and school programs.

Some band representatives have registered their concerns about the ability of publicly-supported school boards to provide relevant programs. Referring especially to the propensity of band students to leave secondary schools before completion, they make the following observations:

The cultural assumption implicit in the curriculum and curriculum materials are inappropriate to Native Peoples.

In some northern isolated districts Native Peoples learn better if taught in their own languages.

Students are often required to travel long distances, often as much as 100 miles a day, to and from school.

Students feel like strangers in the schools.

Parents are not able to comprehend what their children are doing.

Contracts are negotiated with a particular school board and pertain to particular schools. If students are dissatisfied, they do not have the otherwise commonplace choice of another school.

In accord with the spirit of the recommendations for school programs for the general system of schools, these recommendations are made for schools for Native Peoples.

The community liaison encouraged by Ministry guidelines PONA (People of Native Ancestry) I, II and III (in preparation), be continued and expanded. The intent of the liaison should be to make the curriculum offered the students as relevant to their culture as possible without the curriculum becoming a discriminatory confinement of opportunity. One way might be to increase the use of native teachers.

The Ministry of Education play an active role in cooperation with the boards in providing empathetic guidance personnel able to increase the awareness of students of the range of options open to them.

The Ministry of Education and the boards encourage the Native Peoples to exercise their rights of involvement in board and school affairs, including by seeking board membership.

French as a Second Language

The present arrangement for funding French as a Second Language (FSL) was announced by the Ministry of Education in April, 1977. Funding is based on the number of student class hours spent studying French or studying other subjects in the French language. Where a core program in French is offered, it is compulsory for all children in the grade for which it is offered. Further, the Ministry has expressed its hopes and expectations that every board in the province will offer French immersion programs for all students who want them.*

The availability of increased funding for FSL programs led most boards to anticipate increased use of them, particularly for immersion

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- * 1. The term regular, or core, program designates the common present pattern, that is instruction in French as a second language per se.
2. The term extended program designates one in which there are two components: a program in French as a second language plus a subject or subjects taught in French.
3. The term immersion program designates one in which 70% or more of the total instruction time is in French in the first year of the program, regardless of the grade level at which French is introduced. This time allotment may be altered in subsequent years of the program.

or extended FSL programming. However, increased FSL programming combined with overall declines in school enrolments do not suggest a net increase in numbers of students taking FSL. On the basis of several continuing studies made available to me, and on the basis of data from the Ministry of Education, I estimate that number will decline by 4 to 5% by 1980-81. With some increase in extended and immersion programs, the corresponding change in the number of full-time FSL teachers should decline by 3 to 4%.

The problems referred to in previous chapters as being associated with the reorganization of school operations to accommodate declining enrolments may well complicate the administration of sequential FSL programming. An increase in the number of combined or split-grade classes and an increasing number of itinerant teachers (working less than full days in a given school) may well cause more difficulty for FSL teaching than for most programs. The problems may be exacerbated where alternative programs, such as immersion and core, are offered, thus reducing the potential enrolment for each.

The Ministry of Education indicates that no large-scale displacement of unilingual Anglophone teachers due to the expansion of FSL is anticipated.

...it should be realized that, while many school boards will begin the expansion of their French programs even in the 1977-78 school year, the major impact will emerge gradually over the next several years. Normal attrition, combined with careful advance planning on the part of school boards, will alone be enough to keep displacement problems to a minimum. In addition, the possibility of attendance at short French immersion courses will in some cases be enough to upgrade French facility to permit teachers to switch into core French programs where this is desired.¹

The same document also makes the following points:

As the emphasis on French instruction increases across Ontario over the next few years and beyond, the demand for competent teachers will increase... The new increased focus on French programs will itself be a factor in attracting even more candidates into teacher training programs for French as a second language. In addition,

¹Teaching and Learning French as a Second Language, April 17, 1977, Ministry of Education, Ontario.

there are today in Ontario large numbers of teachers who are qualified and able to teach French, but who have opted to teach other subjects. It is anticipated that a significant number of such teachers will be attracted back to French because of the increased emphasis on French, and the improved working conditions that can be expected to develop.

There is a new Ministry plan instituting seven steps to increase the supply of competent teachers of French. They include summer courses, a new French immersion centre, financial support in the form of travel expenses and tuition fees for persons attending the immersion centre, new courses for immersion teachers-in-training, etc.

As the structure of demand for teachers changes, a "watering down" of standards in teaching FSL may become a short-run problem associated with declining enrolments. But it must also be pointed out that declining enrolments are often seen as leading to higher standards of admission to faculties of education and ultimately to better qualified candidates for teaching.

My recommendations related to FSL are these:

In the case of split or combined-grade classes, a special effort be made to schedule separate FSL classes for each grade.

Schools attempt to reduce the movement of itinerant teachers from school to school by changing FSL sessions from 20 to 40 minutes (this is a stated aim of the Ministry's new FSL program).

Boards pay special attention to the integration of secondary and elementary FSL programs.

Where small numbers of students for senior classes (e.g., grades 11-13) jeopardize the maintenance of language programs, boards designate at least one high school as an FSL centre and consolidate senior classes to assure a complete program (grades 9-13).

Boards consider the cooperative services model initiated by the Midnorthern Region, and other cooperative models, to ensure that some consultant services remain available to teachers.

English as a Second Language

English as a Second Language (ESL) is an all-encompassing term covering a variety of programs and needs. As federal immigration policies change, so do requirements for ESL programs. In addition to the standard programs for non-English-speaking students, some boards have now found it necessary to create programs in English as a Second Dialect (ESD) for those students who have come from the English-speaking areas of the West Indies or from an English-speaking background in India or in Pakistan, where the form of English is not standard Canadian English.

The following quotes are taken from a draft of a Standard Brief prepared by the Ontario Association of Teachers of English as a Second Language (TESL):

There is very little related to the teaching of English as a second language which can be spoken of in broad or general terms for the typical ESL student or teacher does not exist... Students in need of ESL instruction vary in age, educational background, native language, socio-economic status, and aptitudes. Teachers of ESL work in varied situations: some have a few ESL classes interspersed between regular classroom subject lessons; some work part-time; some work full-time in ESL in one classroom or in several different classrooms... These and many other parameters related to the TESL profession make it difficult, then, to adequately discuss and make recommendations where current issues and problems in the field are concerned.

The four basic types of ESL programming are:

- (1) reception classes -- using "immersion" techniques,
- (2) withdrawal classes -- in which the child is placed in a regular class but withdrawn for special ESL instruction,
- (3) transitional or bilingual classes -- in which the child is gradually weaned from the mother tongue to English by a bilingual teacher,
- (4) regular class placement -- with reliance on the classroom teacher's expertise (successful only with highly motivated children).

The Ministry of Education has established a weighting factor for ESL. The money generated is based on the number of teachers of ESL employed by a board and goes into the general operating budget, presumably to help defray the extra costs. To many people involved in the

teaching of ESL/D (English as a Second Language/Dialect), the establishment of the weighting factor is considered a step in the right direction in acknowledging that ESL instruction is an add-on that falls more heavily on some boards than on others.

In 1977 the Ministry of Education issued guidelines for the teaching of ESL at the intermediate and senior divisions (grades 7 to 12). The Ministry, at the same time, made provision for up to three credits in ESL being used towards a secondary school graduation diploma.

Since immigration to Canada has been reduced by economic difficulties and public policy, the number of children requiring ESL has decreased and is expected to stabilize over the next five years, in the opinion of representatives of one of the boards most affected -- Toronto. For that board, the number of full-time equivalent teachers used has dropped from a high of 176 (elementary) and 47 (secondary) in 1975-76 to an anticipated 136 (elementary) and 45 (secondary) in 1978-79. The projections are 78 (elementary) and 25 (secondary) for 1980-81.

While some boards agree that enrolment is levelling off, still others report that theirs is increasing. A number of reasons may account for the latter fact:

- (1) Identification techniques are becoming more sophisticated as boards gain experience in dealing with ESL students.
- (2) There is a backlog of students who require extra help in upgrading their skills to reach their full potential.
- (3) The reunification of families remains the top priority in the federal government's present immigration policy, meaning that a larger percentage of immigrants are, and will be, school-age children.

Comments to this Commission about ESL programming have centered upon certain deficiencies, such as the lack of adequate identification and assessment procedures, the peripheral nature of the program in some schools, the use of basement classrooms, the use of untrained teachers, the lack of resource materials and the general lack of integration of ESL with the regular program of the school. As more classroom space

becomes available, however, the use of basements or portables for ESL will, I hope, decline. On the other hand, the use of untrained teachers may well become the norm as principals strive to fill the timetables of existing staff. (ESL teachers claim there is prevalent a mistaken belief that anyone who is English-speaking can teach English to immigrants.)

Mary Hainsworth, in her Report on Second and Third Languages for the Commission on Declining Enrolments, reports:

Teachers already in the ESL/D field are discouraged. Policy changes by the federal government, declining enrolments and the general economic situation all have a bearing on job security for teachers, and are all factors beyond their control. Qualified ESL teachers are disappointed when programs are discontinued, because of their increased awareness of what needs to be done for ESL students in Ontario. Teachers are also discouraged by the lack of tenure, the few opportunities for advancement in the ESL field, the fact that some ESL teachers, being the most recently hired, will be, or have been, the first to be released by boards forced to cut back. With seniority as the criterion for keeping or releasing teachers, the new, but specialized ESL teacher will be released in favour of the longer-tenured non-ESL specialist. Of course, all this is true of teachers in general, not just teachers of ESL/D.

Much of the input from Metropolitan Toronto boards, particularly from the four boards most affected by the need for ESL programming, centered upon their dissatisfaction with the Metro financing formula for ESL. It recognizes for full credit only a student from a non-English-speaking country whose family has been in Canada for less than one year, and for half a credit for that same student the following year. Correspondents complained that this overlooks the child who is born in Canada but arrives at school speaking no English, and the child who comes from another country to join parents who have now established themselves and may already be Canadian citizens.

My recommendations related to ESL are these:

The focus of ESL teacher training courses shift from that of preparing only specialist teachers to that of giving all interested teachers some ESL skills (while continuing to prepare some ESL specialists).

The Ministry weighting factor continue to be tied to the number of ESL teachers employed and ESL become a mandatory service, i.e., the Ministry of Education clearly establish the right of all children needing ESL or ESL/D to that instruction.

Some Experience '79¹ students, together with an experienced TESL member, be utilized next summer to prepare annotated ESL resource lists.

Cost-effectiveness of ESL programs and identification of systematic assessment and monitoring processes be incorporated in any list of projects being considered for funding under the contractual research program of the Ministry of Education.

Multiculturalism

The nation and the province have endorsed a policy of multiculturalism. In doing so, the province recognizes the rights of individual groups to retain aspects of their culture important to them. As part of that policy efforts are being made to eliminate all traces of racism in our schools and consequently in our society.

Given this position, multiculturalism is not an addition to the curriculum, but an ethic or value that should permeate every aspect of the curriculum. From one perspective, multiculturalism is unaffected by declining enrolments, since it is not a specific program requiring cost-efficiency calculations.

The new guidelines on bias being prepared by a Ministry of Education committee for book publishers are a step in the right direction, but even closer liaison between Ministry, the minority representatives and book publishers will be needed in the future. What should be striven for in textbooks is objectivity, neutral language and a world vision.

At present many of our textbooks reflect only one socio-economic class in our society. With the aid of incentives such as the Learning Materials Development Plan, a strong beginning in making our texts reflect the reality of our society has been made. This initiative

¹A provincially-funded summer program to supply employment for senior secondary and university students.

should not be allowed to decelerate. Our efforts must go far beyond the preparation of textbooks and other materials to the development of appropriate attitudes on the part of all citizens.

In-service training of teachers for a multicultural society has been with us these past two years. There remains, however, some misapprehension on the part of many teachers. Multicultural education is sometimes perceived merely as immigrant education. (Indeed, several board representatives replied to questions on multiculturalism with the words "Not applicable".) Every city or country offering economic opportunity is now a multicultural community. Populations are mobile as never before. If school is to prepare students for the future, it must prepare them to live and work in harmony with others of all races, creeds and cultures.

Several board representatives mentioned the danger that if seniority remains the sole criterion upon which redundancies are to be declared, the first persons to go will be those teachers for whom boards have only in recent years recognized a need, i.e., members of minority groups. This is a very serious implication of declining enrolment. The answer, of course, lies in the criteria used in determining redundancy and in the policies of the boards concerning special circumstances.

My recommendations related to multiculturalism are these:

The present initiatives on the incorporation of the ethic of multiculturalism into the curriculum be encouraged and continued.

All teachers be prepared for teaching in a multicultural society. Multiculturalism, as a part of teacher training, should be an ethic that permeates the syllabus.

There be close liaison among publishers, the Ministry and representatives for the various majority and minority groups to ensure quality multicultural materials.

The initiatives begun under the Learning Materials Development Plan be continued and be expanded when feasible to include specific support materials prepared "under contract" to the Ministry.

Third Languages (Secondary Level)

Enrolment in these programs generally declined markedly with the introduction in the late 1960's of the credit system in the high schools and has been declining since. However, the influx of large immigrant groups into the urban areas of the province has created some demand for third language programs that are ethnically based. For instance, the Toronto board has found a demand for two kinds of Chinese, modern Greek, Portuguese, Polish, etc. These kinds of third language programs are therefore dependent on population patterns and changes.

Night school registration used to be closed to daytime students while summer courses were used for remedial purposes only. This is no longer the case and many students are choosing to take a third language option outside regular school hours. This new factor exacerbates the effects of declining enrolment on day-time third language courses, and they may eventually disappear from the regular school program.

Boards, subject to Ministry approval, may offer any language for which there is sufficient demand. Generally speaking a minimum enrolment of 25 students is considered appropriate. Since the final decision rests with the principal, what is considered appropriate varies considerably. Most teachers of third languages teach other subjects as well.

The most popular third languages at present are German, Italian, Portuguese, Spanish and Greek (see Table 4.1). However, even in these languages the effects of introducing the credit system and the subsequent decline in language course enrolments are being felt. Four-year courses are sometimes reduced to three years, or grade 12 and 13 or grade 11 and 12 classes are combined. Grade 13 classes in third languages are perceived to be in greatest danger.

The effects on the secondary school of the new Heritage Language programs at the elementary level have not yet been estimated. Some teachers and consultants feel that the lack of trained teachers, the longer school day involved and possibly family pressures on students

TABLE 4.1

ENROLMENTS IN THIRD LANGUAGE PROGRAMS
(Excluding Toronto Board)

YEAR		GERMAN (12)*	ITALIAN (8)*	SPANISH (13)*	OTHER (9)*
ACTUAL	1975-76	3,312	3,394	1,998	1,611
	1976-77	2,972	3,591	1,815	1,389
ESTIMATED	1977-78	2,859	3,863	1,825	1,198
	1978-79	2,626	3,697	1,753	1,194
	1979-80	2,402	3,445	1,741	1,184
	1980-81	2,311	3,089	1,816	1,123
	1981-82	2,156	2,838	1,769	1,128
	1982-83	2,078	2,674	1,760	1,229

* Number of boards

Source: Report on Second and Third Languages, Working Paper
No. 37, Commission on Declining School Enrolments
in Ontario.

may alienate some students from third language study by the time they reach high school. On the other hand, others feel that some academic training in heritage languages will make the subject easier to pursue in later years, and for that reason more students might choose third language study as an easy option. The elementary school program offers a wide variety of languages, far wider than is now currently offered at the secondary level by even the most "multicultural" of boards. Whether this great range of languages could be offered at the secondary school level is doubtful.

The following are the comments from a major city board:

The enrolment in other than the traditionally-taught third languages is rising slightly. It is difficult to estimate whether this will spill over into the "traditionally-taught" group, as languages seem to be gaining public favour for multicultural, educational and career-oriented reasons. Another unassessed factor which may affect third language enrolment is the new and expanding heritage languages program in the elementary panel.

The decline and demise of Russian may be attributable to the introduction of other Slavic languages. Inasmuch as no heritage languages program has been established in Russian, and insufficient interest was expressed in night school credit courses, there seems to be no reasonable foundation for anticipating its revival.

The particular difficulties with grade 13 classes would indicate the need (at least in urban areas) for some cooperation between secondary schools and between boards, with each school offering only some grade 13 subjects. In other countries, such as Britain, there is a move towards the formation of "sixth-form centres" and "sixth-form colleges" for dealing with small enrolments in senior classes. There is also some liaison with the polytechnics and Teacher Education Colleges, which would tend to suggest that where numbers are small we should explore liaison with the community colleges for grades 12 and 13 work.

There is some feeling among those involved in third language teaching that declining general enrolments, which have as yet barely been felt at the high school level, will kill third language programs, except in those areas where large immigrant groups will support them. Courses may then become dependent on population shifts. For instance, if a large

Italian population gradually gives way to a West Indian population in a certain area, the demand for Italian may well cease at the schools in that area, to be required again somewhere else. Immigration patterns and policies will certainly play their part in this kind of third language program. Thus, it seems that the demand for its language programs may become governed by policies and patterns beyond the control of the local school board, or even beyond the control of the Ministry of Education.

The year before the credit system came into effect there were more language teachers trained than ever before at the University of Toronto's Faculty of Education and every one of them was hired. At a large high school in Metropolitan Toronto in the late 1960's there were 10 teachers in the Modern Language Department. This year the same school has 4.

Since third languages are highly specialized subject areas, few teachers in other subject areas can transfer to them. A few new teachers will be required each year. The following chart illustrates that the total number of third language teachers in training at the Faculty of Education, University of Toronto, has remained surprisingly constant over the years. However, the shifting structure of that enrolment suggests that the demand has not been constant for all languages.

Year	Spanish	German	Italian	Russian	Total Faculty Enrolment
1969-70	39	35	16	17	--
1971-72	22	24	18	16	1,301
1973-74	17	23	22	4	1,374
1977-78	16	17	37	0*	1,350

*Russian no longer offered as an option.

Source: Report from Faculty of Education, University of Toronto

Because third language teachers are worried about their jobs, there may be a tendency to "water down" standards in order to attract more students to the courses. On the other hand, there will also be pressure

on the teacher to produce more stimulating and attractive courses, a pressure to which most dedicated teachers will respond positively.

Third language teachers find that when they need assistance it is not readily available. Not all boards have consultants in language programs. At times a third language teacher may be the sole teacher of his subject in a board or area. There would seem to be a very special need for refresher courses and other efforts made to help these teachers stay up-to-date in their fields.

My recommendations related to third languages are these:

Where numbers for senior classes decline drastically, boards consider creating a language centre at one high school to ensure that a full sequential language program be offered to students who have commenced study of a language.

The choice of languages to be offered be more influenced by community needs than by school traditions.

When the Heritage Language program appears to be fully operational, attempts be made to measure its effects on secondary school programming.

Neighbouring boards cooperate to avoid duplication of services, in particular languages, and to ensure that consultant services are available to teachers.

Heritage Language (Elementary Level)

The intent of this program is to facilitate the retention of languages that immigrant children have acquired at home. However, Heritage Language instruction is limited to after-school or extended school day instruction.

Since the advent of the Heritage Language program, some 45 boards are offering instruction in 30 languages; 52,680 children are involved in 1,960 classes. One urban director has gone so far as to say publicly that the Heritage Language program has been one of the best mechanisms ever for obtaining community and parental involvement in the school. Furthermore, we are developing interest in students and teachers other than those for whom the language is the mother tongue. Many are now realizing that since the classes are public, anyone may join.

In answer to questions on Heritage Language, representatives of those boards offering such programs felt that it was too soon to comment, but predicted that there would be few changes due to declining enrolments provided that Ministry financial support of the program continued at least at the present level.

I recommend:

The Heritage Language program be continued in its present form for a minimum of four or five years. When the program appears to be fully operational and stabilizing, some attempts be made to predict the implications for secondary school programming and to develop plans for the long-term development of the program in schools at all levels.

Early Childhood Education

Within the education community, the reduced demands resulting from declining enrolments and the rising demands for early childhood care/education might appear, at first glance, to have the potential for cancelling out one another. However, education problems are never so easily solved. Before deciding to support an extension of the school's involvement in early care/education, we must have more knowledge (i.e., evidence to warrant sweeping change) than is available in 1978. Moreover, it must be remembered that the Ministry of Community and Social Services in our province has just announced plans to develop local children's services committees. It is planned that these committees will become "the focal point for the coordination, planning, delivery and funding of children's services at the local level," but the extent of the "full range of required services" has not been specified as yet, at least not to my knowledge. No mention has been made of relationships with schools or school boards, or whether these committees are to be school-centered and education-oriented. Obviously there must be some cooperation, sharing of information and, it is hoped, some efforts to avoid duplication.

Much of the evidence of the effects of early education programs is too inconclusive to have much reference to policy. However, there is evidence of positive effects of cognitively oriented programs, particularly

for disadvantaged and "high risk" children. Further, there is reason to believe that effects of specific and planned interventions in programs for 4- and 5-year-olds will persist during the years when children are learning basic skills. These findings suggest that present kindergarten programs for "high risk" children in Ontario could profitably be supplemented with additional program components focusing on special learning needs. This could be done in cooperation with the new local committees referred to above, under the joint sponsorship of the Ministry of Community and Social Services and the Ministry of Education.

There is much clearer evidence pointing to the demand for more day-care services for children below school age. There is also evidence of a need for out-of-school hours care and supervision for many school-aged children. Certainly there is widespread concern for the "latch key" child and for finding day-care for the child who is at school for half a day only.

Schools would appear to possess facilities (e.g., library, gymnasium) and the human resources (e.g., teachers with special skills/talents) to lend support on a cooperative basis for a program of enriched day-care for primary and junior grade children. Athletic programs, opportunities for participation in music, art, drama activities, crafts and special hobby groups are among the activities which could conceivably make up an enriched supplemental day-care program. The provision of such programs in addition to the regular school program would require scheduling accommodations for the use of various facilities, some redeployment of staff and some significant change in hours of the working day for both professional and support staff. However, these are only administrative arrangements, not insurmountable obstacles.

My only recommendation regarding early childhood education is this:

The Minister of Education and the Minister of Community Services confer to determine the extent of services to be provided to "normal" and to "underprivileged" or "high risk" pre-school children, and to very young school children during their out-of-school hours.

With declining school enrolments, the school systems in many communities may, in fact, be in a position to provide efficiently and effectively a large part of the physical facilities and some of the human resources that were previously unavailable but needed.

Special Education

There is no evidence of decreases in the numbers enrolled in special education classes, at least not on a provincial basis. There is also no agreement on the total number, or percentage, of children who require special education treatment. Some writers seem to suggest that up to half of those enrolled in school would, in fact, benefit from special treatment.

Despite increases in special education facilities in recent years, the claim is made that there are about 15,000 children in our province who are on waiting lists for such programs and an estimated additional 15,000 as yet unidentified.¹ There are, in addition, children needing special treatment who are currently excluded from education within the province because they are in institutions which do not have an education program or have gone to private schools outside Ontario. It is suggested that advances in medical science which have resulted in very substantial decreases in infant mortality rates, especially of premature infants and those suffering severe illness and trauma, will also increase the number of children requiring special treatment. On the other hand, certain conditions (e.g., rubella and meningitis) which cause learning disabilities have been virtually eliminated. As a result of all this the special education population is rapidly changing in composition. The early-identification programs which have just begun will undoubtedly find a large number of children (estimated to be at least 10,000) in need of preventive treatment. In total the increases we are faced with seem to be of about 46,500 children. At present, about 12% of students are enrolled in special education programs of one kind or another.

Judi B. Kobrick and Carol Reich of the Department of Special Education at the Ontario Institute for Studies in Education, in a report

¹Education Report -- Ontario School Trustees' Council, Vol. 29, March 27-April 1, 1978.

for the Commission (Working Paper #36, Declining Enrolments and Its Ramifications for Special Education, 1978), make this observation:

"(However,) it is difficult to project special education needs with any precision because tremendous variation exists in how various exceptionalities are defined and assessed. For example, estimates of the incidence of emotional disorders range from 2.2 to 49%. 'Learning disability' is a vague diagnostic category, which is estimated to occur in from 10 to 25% of the population, depending on what definition is used (cf., CELDIC Report, 1970)". (p.7)

When this uncertainty is combined with the fact that being labelled as "special" or "exceptional" may have negative rather than positive effects on a child, and that when additional funds are made available by the province for special education purposes the school boards may, for that reason alone, identify more special education cases, it becomes clear that we must proceed with considerable caution.

There have been great changes in recent years in the type of programming provided, in particular a move from separated special classes to integrated programs of regular classes complemented by special resources in personnel, etc. In addition, it is clear from Tables 4.2 and 4.3 (from the Kobrick-Reich Working Paper) that our present levels of commitment are considerable and growing. However, both the Ministry of Education and the school boards surveyed believe that more needs to be done. Declining enrolments and any attendant decrease in total provincial expenditures (real dollars) for education should not be permitted to jeopardize the future of children who need special education services. However, I have no intention of suggesting more special education just because the scale of other education operations will be reduced. Accordingly, I recommend:

The Ministry of Education ensure, through monitoring processes and the provision of sufficient financial and other resources, that all children who now, by accepted government policy, have the right to special education services, receive the required treatment.

There is some danger that financial constraints and efforts of the general education system to maintain its scale of operations will erode special education, i.e., cuts, when required, may be concentrated on special services. In the smaller school systems it is probable that

TABLE 4.2

ONTARIO SPECIAL EDUCATION ENROLMENTS,
BY TYPE OF PROGRAM AND YEAR

TYPE OF PROGRAM \ YEAR	1975	1976	1977
ELEMENTARY			
SPECIAL CLASSES	37,417	35,750	37,352
RESOURCE PROGRAM	123,072	131,233	138,148
HOSPITAL SCHOOLS	3,468	4,134	2,472
SECONDARY			
SPECIAL CLASSES	29,430	40,714	45,195
RESOURCE PROGRAM	15,889	22,770	23,029
HOSPITAL SCHOOLS	115	423	459
SCHOOLS FOR TRAINABLE MENTALLY RETARDED	7,567	8,204	8,329
SCHOOLS FOR BLIND AND DEAF	1,148	1,126	1,074
NOT ENROLLED IN ANY PROGRAM	977	1,120	536

(1) Since each number represents program enrolments and hence leads to double counting, the entrees are not additive.

Source: Declining Enrolments and its Ramification for Special Education, Working Paper No. 36, Commission on Declining School Enrolments in Ontario.

TABLE 4.3

ONTARIO SPECIAL EDUCATION ENROLMENTS
BY EXCEPTIONALITY, TYPE OF PROGRAM, AND YEAR⁽¹⁾

EXCEPTIONALITY	TYPE OF PROGRAM			
	ELEMENTARY		SECONDARY	
	SPECIAL CLASS	RESOURCE PROGRAM	SPECIAL CLASS	RESOURCE PROGRAM
1 REMEDIAL				
1975	-	62,424 ↑	-	8,604 ↑
1976	-	65,240	-	12,557
1977	-	69,727	-	11,660
2 LEARNING DISABILITY				
1975	6,597 ↑	7,386 ↑	2,652 ↓	1,896 ↑
1976	6,731 ↑	7,681	908	2,676
1977	7,488	8,171	630 ↓	2,186
3-4 RETARDED & SLOW LEARNERS				
1975	19,753 ↑	9,164 ↓	20,909 ↑	783 ↑
1976	20,937 ↑	8,510 ↓	36,322 ↑	2,177
1977	21,618	8,230 ↓	37,983	2,028
5 TRAINABLE RETARDED				
1975	65 ↓	23 ↑	80 ↑	8 ↑
1976	26 ↓	32	90	38
1977	29 ↓	36	129	27
6 GIFTED				
1975	2,907	2,984 ↑	1,353 ↑	467 ↑
1976	2,131	4,526	1,213	1,145
1977	2,427	4,359	2,384	1,217
7 BEHAVIORAL				
1975	2,048 ↓	2,212	1,439 ↓	839 ↑
1976	1,834 ↓	2,406 →	931	902
1977	1,660 ↓	2,239	714 ↓	1,136
8 HEARING IMPAIRED				
1975	773 ↓	499 ↑	264 ↓	165 ↑
1976	666 ↓	525	205 ↓	238
1977	610 ↓	567	188 ↓	237
9 LIMITED VISION				
1975	163 ↓	181 ↓	161 ↓	124
1976	103 ↓	169 ↓	112 ↓	395 →
1977	48 ↓	155 ↓	92 ↓	137
10 ORTHOPAEDIC				
1975	569 ↓	353	249	115 ↑
1976	448 ↓	294 →	152	176
1977	367 ↓	305	167	230
11 MULTIPLY HANDICAPPED				
1975	451 ↑	130	99	33 ↑
1976	681 ↑	243 →	77 →	61
1977	816	151	94	62
12 SPEECH AND LANGUAGE				
1975	1,286 ↓	24,197 ↑	342	1,049
1976	553 ↓	26,793	151 →	1,162
1977	506 ↓	29,775	196	1,135
13 OTHER				
1975	2,804 ↓	13,519	1,927 ↑	1,806 ↑
1976	1,687 ↓	14,806 →	1,843	2,449
1977	1,761 ↓	14,224	2,613	2,974

Source: Declining Enrolments and its Ramification for Special Education,
Working Paper No. 36, Commission on Declining School Enrolments in Ontario.

KEY: ↑ Enrolments increasing regularly ↓ Enrolments decreasing
 ↗ Enrolments appears to be increasing but the trend is irregular ↘ Enrolments decreasing but trend is irregular
 → No clear trend discernible

(1) Since each number represents program enrolments and hence leads to double counting, the entries are not additive.

situations will arise when there will be pressures to reduce services below an adequate level. On the other hand there is also some risk of an enthusiastic over-expansion of special education services. For these reasons, the Ministry of Education will have to emphasize its monitoring role in special education.

One of the greatest unmet needs will be found in professional training of teachers and resource personnel to deal with exceptional children in the regular classrooms. Needs exist for work in particular exceptionalities, assessment and education techniques, and administration. New training models will probably have to be developed to meet these needs. Very likely they will emphasize, even more than presently, the provision of training opportunities on an in-service basis. Some additional funds will be needed, but not a great deal if the programs in the teacher training institutions are switched to an emphasis on in-service training, as I will later recommend be done. For now I recommend:

The necessary professional training in special education be provided in the teacher training institutions, supplemented where necessary at the school systems level through various forms of in-service programs for re-training and upgrading experienced teachers, and particular attention be paid to the results of the survey of the adequacy of current programs reported by Kobrick and Reich (see Table 8, p. 33, Working Paper #36, Commission on Declining School Enrolments in Ontario, 1978).

It is simply impossible to estimate the additional costs of the full special education program envisaged, owing largely to a lack of knowledge of costs of the existing program but also to the uncertainties of its magnitude and scope and the extent to which existing facilities and personnel resources can be utilized. If the movement from special classes to resource programs within the regular classrooms can be continued, there could be reduced unit costs for special education in many boards. As an outside figure, I would estimate that costs of expanding the present program should not exceed an additional 10%. The first problem, however, is the maintenance of existing programs under the conditions of inflation and budgetary constraints. Should these conditions lead to the curtailment of special education programs,

it will not be a consequence of declining enrolment. Indeed, opportunities which declining enrolments present greatly reduce the difficulties of dealing adequately and justly with children needing special education.

Even at the risk of being ruled out of order by the Minister of Education, I wish to conclude with one very important comment and recommendation. I know very well that a Bill is now before the Legislative Assembly which would make the provision of special education facilities mandatory on the part of all boards, and I sincerely hope that this Bill receives the wholehearted support it deserves from all political parties as well as from the general public. I also wish to see greater integration of special education programs into the regular programs of our schools. I do not like segregation on any basis, save possibly where medical reasons or public safety demands it or, naturally, for the welfare of the child. Of special importance, of course, is early identification and use of remedial and preventive measures at an early age.

Over and above this concern for the exceptional children, however, is a fear that we are either evading or overlooking the acceptance and statement of a general fundamental principle which must apply to ALL children in this province, including those requiring special education services. It is, simply, a statement of the right of each and every child to receive the education services he or she needs, as determined by the Minister of Education. The principle is enunciated clearly enough in Living and Learning (Hall-Dennis),¹ but I sometimes wonder whether we have accepted it. I will certainly not be content until we do so, and accordingly I recommend:

The Minister of Education amend the Acts and Regulations to include in clear and unmistakable terms the unalienable right of every child to receive the education he or she needs, as determined by the Minister of Education.

The Education Act of England and Wales in 1944 expressed it in terms of the "interest, abilities and aptitudes" of every child. While

¹Ontario, Provincial Committee on Aims and Objectives of Education in the Schools of Ontario, Living and Learning, Toronto, Newton Publishing, 1968.

not satisfied with that particular wording, I do accept and applaud the concept. We can do no less for all our children, and I hope we may do even more.

Community Schools¹

In recent years public involvement in formal education has increased sharply through more open school visiting policies, parent advisory committees, parent-teacher interviews and volunteer programs in schools. As a result a closer, more open relationship has grown between schools and their communities and there have been marked changes in attitudes on both sides. In many jurisdictions the growing number of empty classrooms has encouraged local groups to turn to the school for facilities for meetings, clubs, recreational facilities and adult education programs.

The gradual reduction in numbers or disappearance of some of the traditional institutions for dealing with social problems, including community groups, multi-age family units and church, has placed greater demands on the school to provide community programs and answer social needs. At the same time new community needs and demands have emerged, including adult education programs, day-care services, services for the increasing population of elderly people, recreation for youth, improved use of creative and leisure opportunities, counselling and the like. Frequently, in responding to these challenges and needs, the community has turned to the school for support, help, leadership and coordination.

Quite frankly, as indicated in my Second Interim Report, I favour the development of community schools, although I must confess that I tend to consider this as an extension of the continuing education concept, since we are considering here education-oriented programs. But there is the question of jurisdictional rights and responsibilities, and I see this development as much the job of the Ministry of Community and Social Services as it is of the Ministry of Education. Accordingly, I recommend:

¹See Working Paper #3 on Community Schools, prepared by Dr. Keith Sullivan for the Commission.

The Minister of Education encourage the development of community schools and to this end open negotiations with the Minister of Community and Social Services to ensure cooperation and coordination of efforts and services, including funding and administration.

Some of the ways in which the expansion of the concept of the community school may be expected to alleviate problems associated with declining enrolments are obvious; others are less direct and may have only limited and long-term application. These are some of the advantages:

1. The most visible advantage is the use of otherwise vacant school space.
2. Since education programs should be broader and more flexible in community schools, students who would otherwise leave school would be likely to be retained.
3. As boards of education continue to broaden their commitments to continuing education, new students for these new kinds of schools would be attracted.
4. The community school needs professionals capable of identifying and analyzing needs, designing programs, recruiting resources, providing instruction, organizing citizens into activities and effective and productive teams, and communicating to many publics. Obviously teachers would represent one source of supply of such personnel and this would alleviate to some extent the cutback in teacher positions by providing alternative but similar jobs for teachers.
5. A characteristic of the community school is its ability to bring together related services, thereby reducing expenditures. Secondary school community service programs, for example, provide students with enriching experiences and supplement important social services. Volunteer programs solve problems of communications and parental attitudes and at the same time give teachers and students additional help. Day-care and "pre-school" programs meet otherwise costly needs of youngsters and their parents and at the same time give opportunities for practical experience to the elementary, secondary and college students associated with these programs. The careful implementation and maintenance of these and other reciprocal programs free funds for other programs of the school and community.
6. The provision of new educational opportunities for adults would create new forms of funding and possibly new funding agencies, thereby ensuring the total education community of a reasonable share of tax revenues and an adequate basis for allocating funds to local needs.

7. In the long run, the community school (and the introduction of some of its features into regular schools) would create a climate for improved public and political support for schools, which will be badly needed in this era of declining school enrolments of children and youths.

Private Schools

Although consideration of the private schools in the province is outside the terms of reference of this commission, a well planned brief which stressed their growth was accepted from the Ontario Association of Alternative and Independent Schools. Certainly any expansion of this system does affect the public sector school population, and for this reason I include these comments.

In the present economic state, it does not seem feasible to divert funds from the public education sector in support of the private sector. However, two items should be mentioned:

1. School boards might consider leasing empty schools on a cost recovery basis to private schools, in order to retain the property and site.
2. The Commission has been made aware that in Australia income tax exemption has been granted to those paying private school fees.. This is a feature which the Association might consider requesting. It should be noted, although, that in most cases those taking advantage of the private school facilities are, of necessity, not in the lower income brackets.

Chapter 5

Implications of Declining School Enrolments for Teacher Education

Teacher education covers the total process that produces and maintains a competent, up-to-date supply of qualified persons to staff the schools of this province. This process provides not only the pre-service preparation of teachers but it must provide for the recurrent and in-service education needs of the active teaching force. While this concept has been widely accepted in theory, circumstances in Ontario have tended to put the major emphasis on, and directed practically all available resources to the pre-service function, leaving continuing education largely to the personal initiative of the teacher. The Ontario College of Education and the teachers' colleges, for instance, developed and were seen largely as single purpose pre-service training institutions. The staffs of these colleges did participate in some continuing education activities, sometimes on an extensive scale, mostly in the summer and mostly on behalf of the Ministry of Education. The greater part of this activity, however, was designed to make up for perceived inadequacies in the admission requirements for teacher candidates or to qualify teachers for supplementary certification.

During the rapid expansion of the school system in the late 1950's and the 1960's, an increasing amount of summer school work was devoted to massive emergency training programs to cut short the longer regular programs in order to meet the insatiable demands for more and more teachers. Little time or energy was left for programs of enrichment, refreshment or updating of practising teachers. Valuable initiatives were taken by the teachers federations in providing courses in these areas, but they touched only a fraction, usually the most dedicated fraction, of the teaching force.

With the expansion of the teacher education system in the late 1960's and early 1970's, an expansion which should have begun a decade

earlier, and following the Patten¹ and MacLeod² Reports which created a diversity of institutions and programs, serious attempts were made by the planners in these new institutions to give the new faculties of education diversified roles. They saw in-service education, research, development and graduate studies as legitimate activities for the faculties to combine with their continuing pre-service training function. The education climate at that time encouraged the development of a variety of teacher education programs and for the first time in Ontario programs of teacher education emerged in several faculties. There was also a considerable movement in the direction of developing more graduate degree programs in education, in addition to the complete series of specialized graduate programs offered at the Ontario Institute for Studies in Education (OISE) in Toronto and in a number of its field centres.

Taking seriously their responsibilities for assisting in the continuing education of teachers, many faculties devoted considerable energy to offering a limited number of imaginatively planned in-service programs which were well received by the profession, particularly when practicing classroom teachers had been involved in the planning. Increasingly teachers began looking to OISE and the new faculties for help and leadership in meeting their perceived needs in a rapidly changing school environment. Unfortunately resources were inadequate to meet many of these needs. Faculties were funded on formula mainly on the basis of the number of pre-service candidates they enrolled. Supplementary certificate and diploma courses offered as in-service education to teachers were inadequately funded, and shorter workshop offerings and consultative activities undertaken by faculty members received no funding at all. The situation was further complicated by ambivalence within the Ministry about the appropriate Ministry role in in-service education. Up to the present that role has been substantial. Also tending to limit in-service activities in faculties have been jurisdictional disputes over the right to offer courses in certain fields as

¹Report of the Minister's Committee on the Training of Secondary School Teachers, 1962.

²Report of the Minister's Committee on the Training of Elementary School Teachers, 1966.

well as unresolved requests for better funding within the triangle comprising the faculties, the Ministry of Education and the Ministry of Universities and Colleges.

Recently there has been a drop in the number of teachers applying for certain summer courses. This can be explained in part by the fact that an academic degree has been the legal admission requirement for all teacher candidates for several years now and consequently young teachers no longer have to make up for inadequate admission requirements. In part, too, the decline may be explained by the tensions and the militant attitudes toward bargaining between federations and trustees, a situation which does not foster attitudes conducive to further study.

However, our hearings have indicated that there is almost universal agreement on the part of teachers, administrators, school boards, the Ministry and the general public that there is a great need for carefully developed in-service programs, a need which will become more acute as declining enrolments and reduced new hirings create a more static and aging profession and, at the secondary school level in particular, create serious imbalances between the academic and professional qualifications of those retained on staff and the requirements of the teaching positions to which they may be assigned.

When the Ministry responded to the recommendations of the Patten and MacLeod reports to create more faculties of education and to transfer the teachers' colleges into the universities, it began a process which, given the growth rates of the late 60's, plus the overly optimistic projections of future needs for teachers and the political and social problems inherent in closing out institutions, produced an over-expanded capacity for pre-service teacher education in Ontario, particularly as birth rates continued to drop much longer than anticipated by the forecasters.

The oversupply of teachers is so severe that no one can argue against cutbacks in the provision of pre-service education. The figures drawn from the Teacher Information File, Ministry of Education, reported in Tables 9 and 10 and depicted graphically in Charts 5 and 6 of my

Second Interim Report, when combined with the data given there in Tables 11, 12, 13 and 14 on Teacher Withdrawals and Acquisitions from 1966-67 to 1976-77, leave no doubt about the scope and seriousness of the problem.

I experienced great difficulty in tracing new teacher graduates, and even experienced teachers who had lost their jobs, because records of addresses were kept only for those who were active members of the teaching force. Even these records were not up to date, and at the time we made our sample surveys we found that some were not teaching, although classified as "Active," and others were teaching who were classified as "Inactive" (i.e. not teaching). The records of graduates of the faculties are not kept up to date, there are many errors in the university alumni files and the data banks at the Ministry of Education and of the teacher associations do not retain up-to-date records of those who are no longer teaching.¹ Consequently our figures do not include those teacher graduates who accepted employment as teachers in jurisdictions outside Ontario, nor those who found alternative employment outside the school systems. Only if accurate statistics on such phenomena were available could we properly assess the employment situation of the teacher graduates and the general usefulness of the teacher training program.

I undertook a number of surveys, 4 in all as things developed, starting originally with the faculties of education in what was to be a cooperative study of their graduates based on information from their own records. Since faculty records did not include recent addresses (despite assurance that they did) our initial mailing of a questionnaire produced so few replies that plans for the study by institutions had to be abandoned. The results we received, from those teaching as well as from those not teaching, constituted only an "accidental" sample, and with very small numbers, but I did have Dr. M. Gill and Dr. C. Watson analyze the responses. A special subsample of Queen's graduates was studied by Professor W. Peruniak, but he also encountered unanticipated

¹I have just been informed that the master files of the teacher associations will, in future, contain continuing records of any teacher dismissed as surplus/redundant.

difficulties in tracing former students. Two other studies were based on the records of the Ontario Regional Offices of Employment and Immigration Canada, and of registered Canada Manpower Centre clients and active claimants receiving Unemployment Insurance Benefits. They were reported on in part in my Second Interim Report. Mr. Michael Sinclair did the Manpower study and Mr. Brian Wolfe the one based on unemployment benefits. Full reports of all four studies have, of course, been prepared and will be made available since the information gleaned -- especially the record of the comments of the teachers about the usefulness of the teacher training program -- will be of value to others when plans are being made to revise teacher education programs.

The findings of the 4 studies generally do not support the claim that teacher education can be considered a form of general education and a useful preparation for occupations unrelated to teaching. The reactions of the respondents were largely negative, some even in regard to usefulness of their training for teaching in schools, although the experience gained in practice teaching was often viewed far more positively. Admittedly, the respondents may have felt bitter and cynical about their experiences, and indeed some classified their undergraduate university education as also being of little value to them in their non-teaching positions. Possibly the value of both the undergraduate programs and teacher training will become more evident as time goes on, but certainly the responses I received raise grave doubts in this regard.

Although the 4 studies differed markedly in scope and in the numbers of teachers or "would-be" teachers contacted, the agreement in the findings is striking. The majority of the respondents undertook the program because of a strong desire to become teachers and many were still, after several years, hopeful they still might be employed as such. The alternative forms of employment secured seemed definitely to be considered by them as less desirable than teaching and some of the results clearly indicated that the monetary rewards were definitely less as well. It may prove difficult to persuade these graduates that other occupations are worthy and rewarding, even though associated with "teaching" in settings other than schools, for example, in industry and

commerce. The survey results support the impressions I had gained from discussions with unemployed new graduates and with teachers declared surplus or redundant.

The majority of the respondents made it clear that the practicum and informal features such as inter-personal skills were the only helpful classes for other types of jobs. Some indicated a feeling that both university education and teacher training served only to make them over-qualified for other positions. A more realistic view of the employment situation on the part of the staff of the teacher training institutions and a willingness by them to develop newer and more broadly-based programs, plus a more realistic set of job expectations on the part of the prospective applicants for enrolment, could lead to quite different attitudes and actions.

Some of the respondents were bitter over the fact that they were not informed, or at least not better informed, about the availability of teaching positions. They felt it was the fault of the government and the faculties of education that they found themselves in the ranks of the unemployed, and consequently that the government and boards should "find" or "make" jobs for them, for example, by lowering the pupil-teacher ratio or getting rid of incompetent teachers. Probably the hardest fact for those in non-teaching jobs to accept is that their university and teacher training knowledge and skills will not be fully utilized in their new positions. It should be noted here that there was some indication that there is discrimination against employment of females in the job market, or at least that for these respondents the females did not fare as well as the males.

One of the principal investigators pointed out that while there probably is overinvestment in teacher education, this may be true of other disciplines too, and consequently reductions in teacher education may cause equally grave spill-over problems in other fields. The effects of loss of employment opportunities for university graduates is being and will continue to be felt throughout the university system, probably more particularly in the arts and science faculties and others

of the non-professional schools. The government, therefore, may wish to look at the teacher training situation in light of the general picture of higher education and of possible overinvestment in it.

The general background of the present position for teachers is given in Table 5.1, which shows the total number of teacher graduates of recent years (1972 to 1977) from the colleges and faculties of education in this province, for elementary and secondary schools separately and combined. Also given are the number of active graduates, i.e., those teaching in Ontario schools, and the number of inactive graduates, i.e., those not teaching in Ontario schools. (These figures do not include the graduates who have accepted employment as teachers in jurisdictions outside Ontario, nor those who have found alternative employment outside schools.) In 1977 there were only 1,292 active graduates for elementary schools of a total of 3,311 enrolled, or 39.02%; for secondary schools, there were 1,344 active graduates of a total of 3,639 enrolled, or 36.93%; for both types of schools, the total of active graduates was 2,636 of a total of 6,950 enrolled, or 37.93%. As enrolment declines, the demand for teachers will decrease, although not necessarily in direct proportion since the pupil-teacher ratios may be altered through the collective agreements between the teachers and their employers, the school boards.

To give some indication of what the future may hold for teacher demand, I have shown in Table 5.2 the estimated total teaching force, separately for elementary and secondary schools as well as the total, as calculated by Professor Hansen as a basis for his FLEXOR Teacher Education Computer Model, 1978, to which reference will be made in greater detail later. For our present purposes, however, it is sufficient to draw attention to the estimates of the Total column, which shows a decrease in the teaching force from 92,626 in 1977¹ to an estimated 86,090 teachers in 1990 -- a decrease of 6,536 teachers, or 7.06%. This decrease seems low, and indeed other estimates of the total teaching force, calculated on the basis of different assumptions, show an even greater decrease, although we must remember that the first part of the

¹The actual figures which have now been released for 1977 differ by only 0.4% from the estimated values used by Hansen. Such a slight difference will not affect the validity of his results.

TABLE 5.1
ACTIVE AND INACTIVE TEACHER GRADUATES
OF COLLEGES AND UNIVERSITIES IN ONTARIO, 1972-77

ACADEMIC YEAR	LEVEL	ENROLMENT IN NUMBER	YEAR OF GRADUATION	NUMBER OF GRADUATES	NUMBER OF ACTIVE GRADUATES (1)	NUMBER OF INACTIVE GRADUATES (2)	PERCENTAGE OF ACTIVE GRADUATES OF	
							TOTAL GRADUATES	OF ENROLMENT
1971-72	ELEMENTARY	4,196	1972	3,515	2,228	1,287	63.39	53.10
	SECONDARY	3,133		2,756	1,744	1,012	63.28	55.67
	TOTAL	7,329		6,271	3,972	2,299	63.34	54.20
1972-73	ELEMENTARY	3,139	1973	2,816	1,922	894	68.25	61.23
	SECONDARY	3,276		2,849	894	955	66.48	57.92
	TOTAL	6,415		5,665	3,816	1,849	67.36	59.54
1973-74	ELEMENTARY	1,780	1974	1,623	1,225	398	75.48	68.82
	SECONDARY	3,036		2,685	1,898	787	70.69	62.52
	TOTAL	4,814		4,308	3,123	1,185	72.49	64.87
1974-75	ELEMENTARY	2,229	1975	2,066	1,641	425	79.43	73.62
	SECONDARY	3,512		3,161	2,382	779	75.36	67.82
	TOTAL	5,741		5,227	4,023	1,204	76.97	70.07
1975-76	ELEMENTARY	3,347	1976	3,176	2,155	1,021	67.85	64.39
	SECONDARY	3,762		3,423	2,225	1,198	65.00	59.14
	TOTAL	7,109		6,599	4,380	2,219	66.37	61.61
1976-77	ELEMENTARY	3,311	1977	2,969	1,292	1,677	43.52	39.02
	SECONDARY	3,639		3,122	1,344	1,778	43.05	36.93
	TOTAL	6,950		6,091	2,636	3,455	43.28	37.93

Source: (1) Education Statistics, Ontario, 1977, Ministry of Education (as of October 15 of year)
(2) Teacher Information File, Ministry of Education

TABLE 5.2

ESTIMATED TEACHING FORCE IN ONTARIO SCHOOLS,
1977-2001

ACADEMIC YEAR	ELEMENTARY SCHOOLS	SECONDARY SCHOOLS	TOTAL
BEGINNING SEPTEMBER			
1977 (EST.)	56,519	36,108	92,627
1978	55,683	36,814	92,497
1979	54,894	37,101	91,995
1980	54,566	36,667	91,233
1981	54,425	36,113	90,538
1982	54,771	35,068	89,839
1983	55,176	33,868	89,044
1984	54,754	32,770	87,524
1985	54,286	32,405	86,691
1986	54,198	32,086	86,284
1987	54,337	31,968	86,305
1988	54,684	31,706	86,390
1989	54,995	31,255	86,250
1990	55,521	30,569	86,090
1991	55,931	30,334	86,265
1992	56,297	30,314	86,611
1993	56,592	30,521	87,113
1994	56,819	30,695	87,514
1995	56,971	31,053	88,024
1996	56,036	31,315	88,351
1997	57,026	31,545	88,571
1998	56,927	31,741	88,668
1999	56,713	31,940	88,653
2000	56,402	32,124	88,526
2001	56,016	32,274	88,290

Source: FLEXOR Teacher Education Computer Model -
B.L. Hansen, 1978

elementary school enrolment decline had started as early as 1971. The actual full-time teaching force in Ontario has decreased from 93,000 teachers on September 30, 1970, to 92,226 on September 30, 1977 -- a drop of only 774 full-time teachers. During that period, however, the number of full-time elementary school teachers decreased by 2,535 whereas the number of full-time secondary school teachers increased by 1,761 (see Education Statistics, 1977, Ministry of Education, Ontario, Table 5.01, p. 73).

The demand for newly-qualified teachers can be readily estimated from the enrolment projections by making certain assumptions about pupil-teacher ratios, withdrawal rates and acquisition factors (such as absorption of redundant teachers and of graduates from previous years who failed to get teaching jobs). At the secondary school level, by using historic trends as a basis, one can also project demand by major disciplines and by grades or levels. Such detailed projections are naturally subject to substantial errors, or can be if the assumptions are later found to be no longer valid, but they do give at least an indication of impending shortages and surpluses in the short-run. I had special tables of such detailed projections to 1987 prepared on the computer model used in the Department of Educational Planning at OISE (which they developed for the Ministry of Education), and the results are included in Chapter 8. Readers will note that relatively conservative enrolment projections and assumptions have been used, but that even so the demand for newly qualified teachers drops dramatically, although the total teaching force does not decrease as much as might have been expected. However, this simply means that the problems of redundancy will not be as great, not that the demand for newly qualified teachers will increase. Similar results are being calculated for each school board and will be made available to them later. It is difficult for every board to prepare such estimates, and accordingly I recommend:

The Minister of Education contract with the OISE Department of Educational Planning (which has developed the computer model needed and has access to all the data required) to prepare the calculations mentioned in the above paragraph for the school boards each year, as a service to local planning.

For the secondary schools (the results have been shown separately for the main subject areas in Chapter 8) one finds a strange mixture of undersupply in some fields and gross oversupply in others. These figures, again, are being prepared for the Commission by the OISE Department of Educational Planning under contract with the Ministry of Education. The Ministry should have these data prepared each year for every school board, as part of the service specified above. Clearly, very careful consideration must be given to such conditions of oversupply and undersupply when applicants are being selected and admitted to pre-service training programs and when programs of retraining and upgrading are launched through in-service facilities.

For a thorough follow-up study of teacher supply for the longer-term and of both pre-service and in-service education, including the costs for the teacher-training institutions as well as for the province, I asked Professor B.L. Hansen, of the Hansen Group of Management Consultants, to develop a complex but flexible computer model for my Commission which could also be used later, if necessary, for each of the institutions concerned. His model not only shows the supply of new teacher graduates required for each year up to the year 2001, and the corresponding number of admissions needed, using the enrolment projections for elementary and secondary schools we selected, but also calculates costs (total, per student enrolled and per graduate employed). Values are shown separately, of course, for the pre-service, in-service and combined results, and for elementary and secondary schools, since the information for each is needed in planning for the future. Hansen's model, which he has called the FLEXOR Teacher Education Computer Model, has been demonstrated to the staff of each teacher training institution and to officials of the Council of Ontario Universities, since I specifically requested and authorized him to discuss its development and the results with them. Incidentally, the model can, I am sure, be easily adapted for similar use with other types of postsecondary institutions and for school boards, which means that the model will prove to be an extremely powerful tool for the government and other agencies to use in planning.

The major assumptions made by Hansen include changes in pupil-teacher ratio, percentage withdrawals of teachers, retirements at age 65

and on 90 factor¹, ratios of admission to graduates required and the percentage "new" teachers will be of total "new hirings". For his 10 simulations to the year 2001, under assumptions too numerous to specify for each simulation, Tables 5.5B.1 to 5.B.10 in Appendix B show estimates of graduates required as new teachers, number of admissions to pre-service and in-service programs (separately for elementary, secondary and combined), and costs (total, per student and per graduate hired). Note that an in-service component was built into the model, based on the present programs but with an increasing enrolment over the years, so that the "total" admissions include this element as a sort of "floor" each year. The pre-service component is shown as a separate element. Of the various assumptions, the most critical ones seem to be the retirement factor, percentage of new teachers assumed to be new graduates and ratio of admissions to graduates required.

It is evident from the 10 sets of results shown here that unless one assumes that the newly graduated teachers constitute a very substantial portion of "new hirings" (which is unlikely during the next 10 years and possibly 15 years), the "supply" needed is very small indeed and the "admissions" will drop very quickly to less than half the number enrolled in 1977. For instance, starting with the 1977 "benchmark" total combined pre-service admission level of 5,698 and the equivalent 2,650 of graduates required as new teachers in 1977, the following set of maximum and minimum values are secured (from Tables 5.B.1 to 5.B.10).

Table Number	Total Pre-service Admissions Graduates Required as New Teachers							
	Minimum		Maximum		Minimum		Maximum	
	Number	Year	Number	Year	Number	Year	Number	Year
12	912	1984	1,676	1995	629	1984	1,060	1997
13	786	1984	1,325	1997	629	1984	1,060	1997
14	912	1984	3,000	2001	629	1984	1,849	2001
15	786	1984	2,311	2001	629	1984	1,849	2001
16	2,279	1984	4,189	1995	1,573	1984	2,650	1997
17	1,966	1984	3,312	1997	1,573	1984	2,650	1997
18	2,279	1984	7,500	2001	1,573	1984	4,623	2001
19	1,966	1984	5,778	2001	1,573	1984	4,623	2001
20	1,376	1984	2,319	1997	1,101	1984	1,855	1997
21	1,376	1984	4,045	2001	1,101	1984	3,236	2001

¹If age plus experience in years equals 90, a teacher may retire without penalty.

Clearly the minimum period is in all cases around 1984, and the maximum towards the end of the century, but the values differ tremendously, depending on the assumptions. Accordingly, if it were not for the assumed steadily increasing "in-service" component built into the model, the total enrolment would generally remain low until about 1985. The complete set of reports submitted by Professor Hansen is available and should be carefully studied by all parties (government, universities and teacher associations) vitally concerned with this major problem of teacher demand and supply. The short-term measures recommended in my Second Interim Report, if implemented, will give sufficient time (at least two years) to complete the long-term plans for teacher education, to which I now turn my attention. Incidentally, in considering the alternatives, the cost figures should also be compared; some are prohibitively high. Of the simulations, I think 12 to 15 may be too low and 18 and 19 too high. Perhaps 20 and 21 will prove the most likely.

Given the fact that Ontario has a relatively young teaching force, a shrinking school system is bound to produce a substantial number of redundant teachers. If these are to be absorbed within the system the job prospects for the new graduates are further reduced. Thus, the difficult question emerges: how far should we cut back the pre-service teacher education capacity at this time? Different answers emerge depending on what assumptions one makes and what factors one considers important. A quick short-term drastic solution would have been to cut the whole teacher training system immediately by 50%, and cut it in half again by 1983. The effect would be to dismantle the major part of a relatively new and vigorous system put together within the last decade at considerable cost and energy, and one that will have to be recreated when large numbers of the current teaching force reach retirement age, i.e., when the Teacher Bust follows the Teacher Boom. A less drastic approach would be to make a series of modest cuts in faculty size and to use the expert resources thus released to improve the way we handle the induction of young teachers into the profession, and the way we provide for their continuing growth and competence and, for that matter, the continuing in-service programs for all teachers.

It is clear that exact manpower planning cannot be applied to teacher supply, even if it were desirable to do so, because not all candidates admitted to teacher training graduate or use their training in traditional school classroom settings or in allied jobs. In 1977 elementary candidate admissions (see FLEXOR simulations) in the colleges averaged 2.14 to each graduate hired. The figure for secondary candidate admissions was 2.16. It is clear that these levels of admission are too high. We have, therefore, run simulations on the FLEXOR Model for elementary admissions to go from the current 2.14 to 1.40, and others where they go from 2.14 to 1.25. Similarly, we have run simulations for secondary admissions to go from the current 2.16 to 2.00 and others to go from 2.16 to 1.25.

Another important variable is the percentage of new hirings which should be made, or which we might expect would be made, from current graduates as compared with the percentage of new hirings from other sources, including teachers made redundant in other parts of the school system. Many briefs pointed out that it would be detrimental to the quality of teaching in our schools if we should have to go through any prolonged period with few new graduates entering the teaching force. On the other hand, there is a strong sense of obligation that the number of practising teachers made permanently redundant should be kept as low as possible. With these points in mind we did simulations on the FLEXOR Model for admission levels assuming a gradual decrease from 50% of new hirings coming from the group of new graduates, down to 40%, 30% and 20%. We also made one set at 50% throughout and another at 35% throughout. Factors of retirement at age 65 or of retirement under the 90 factor were used.

I have been influenced by the widespread opinion, expressed over and over again at the hearings and in the briefs, that in-service education is a legitimate, indeed an essential, role for the faculties of education as well as for OISE, more particularly under conditions of declining school enrolments. In the simulations, therefore, we looked at admissions to those institutions in both the pre-service and in-service categories. The in-service figures for 1977 represent actual

full-time equivalents currently reported by the faculties. We have assumed that these would increase at approximately 5.2% per annum (an overall increase of 66% in the next 10 years), to a maximum of 1,700 in-service students. This growth should, in fact, materialize as many teachers, to retain their jobs or qualify for a transfer, will need training in subject areas other than those for which they were originally certified, although such training may perhaps be taken over by the respective discipline departments and faculties in Arts and Science. In addition, the new Ministry policy expressed by the Ontario Teaching Certificate, under which all supplementary qualifications, including Type A specialization, is moved outside the basic training period, will intensify the requirement for this kind of service. If the government should accept, as many people have recommended, a policy of term certification rather than the system of permanent certification currently in use, then the full-time equivalent admissions to in-service education would need to be greater than those shown in the tables.

Having considered all the evidence presented I concluded that substantial cuts in the number of pre-service places was essential, and so recommended on a short-term basis in my Second Interim Report. However I would not cut the faculties down to a size where they were just sufficient to produce the modest requirements of new teachers needed in the next 10 years.

I present, therefore, the following set of recommendations, most of which need to be considered together to clarify my proposed solution for the current crisis of teacher education in Ontario. It should be noted, in particular, that the rejection of some of the more significant ones would destroy the validity of some of the other proposals; they are not independent of each other, and never can be.

5.1 Supply and Demand of Teachers

In agreement with the Ministry of Education's Committee on the Costs of Education, which has proposed that the Ministry divest itself of direct responsibility for the organization and administration of

programs that are within the competence and expertise of the faculties of education, I recommend:

The Minister of Education close both the Toronto and Hamilton campuses of the Ontario Teacher Education College at the end of June, 1979, and transfer their pre-service responsibilities to the faculties of education.

This recommendation takes on added significance following the institution of a single Ontario Teaching Certificate. This will require that a teacher-training institution prepare candidates for a broader spectrum of grades than before. Traditionally the Ontario Teacher Education College (OTEC) (and Laurentian and Nipissing faculties) have been staffed to offer specialized work at the primary and elementary levels only, and major changes would have to be made in their programs and staffing.

Further, I recommend that to strengthen the in-service functions of the faculties of education and OISE:

The Ministry of Education seriously consider ceasing to offer or contract professional development courses for teachers, but retain an involvement by providing leadership in a coordinating capacity for such programs offered in or by faculties of education and OISE.

To ensure some early significant reductions in the intake of pre-service candidates to the training faculties I supplement the interim recommendations of my Second Interim Report by recommending:

The Ministry of Education and Ministry of Universities and Colleges establish, and announce immediately, a pre-service quota for funding for September, 1979, and for September, 1980, which would be 50% less than the 1977-78 actual admissions.

For the longer range, I recommend:

The Ministry of Education and the Ministry of Universities and Colleges, in consultation with the Council of Ontario Universities and the specific universities which have faculties of education, determine the minimum size of the pre-service capacity for teacher education which should be maintained over the next 10 years, including specification of which faculties

shall be closed, if any, and the quotas for each of the remaining faculties, which, subject to periodic review, they will guarantee to fund.

I further recommend:

The plan in the preceding recommendation be revised in 1988 in accordance with the needs for pre-service education which seem likely for the 1990's and beyond.

Further recommendations will call for decisions on minimum support for in-service work, induction programs and research. Once these decisions are made a guaranteed comprehensive minimum system of teacher education will have been specified. In laying out such a minimum system care should be taken to specify the institutions to be involved and to ensure that the province keep capacity capable of preparing and rejuvenating the profession and capable of being expanded quickly and easily to meet anticipated later demands as well as any unexpected temporary fluctuations in demand for pre-service education of teachers.

In order that there be no misunderstanding or misrepresentation of the potential job market for teacher candidates, now and for the immediate future, I recommend:

The Ministry of Education and the Ministry of Universities and Colleges, in consultation with the Ontario Teachers' Federation and the teacher training institutions, prepare an official statement of the likely requirements of teachers for the next decade, including the probable number of newly qualified graduates from the teacher training institutions who are likely to be appointed as teachers in our publicly supported school system.

I further recommend:

The statement called for in the preceding recommendation be distributed to all grade 13 classes, to all universities through their presidents and the deans of arts and science and education and be published in full in the Ministry of Education publication Dimensions and through press releases and other media channels.

In order to avoid serious oversupply in one or more subject areas, and possible undersupply in others, I recommend:

The Minister of Education and of Universities and Colleges request the school boards to review and revise the projection of teacher demand, by subject areas, and this projection be up-dated and reported annually to the Ministry through a continuing contract with the OISE Department of Educational Planning.

I recommend:

Based on the information obtained from the reports requested in the preceding recommendation, the Ministry, in liaison with the training institutions, arrange co-ordination of the numbers being trained in various subject areas and levels, but without applying rigid manpower quotas.

5.2 Pre-service Education

Given the modest requirements for new teachers in the years immediately ahead it is obvious that pre-service education will occupy considerably less faculty time during the coming decade. But even within this reduced emphasis there have been proposed for the pre-service programs some interesting and useful recommendations, which I accept and present below.

As school enrolments continue to decline, effective transfer of teachers already in the system will depend upon the ability of the teacher, through his/her training and natural talents, to accept alternative assignments. Teachers will have to become more generalist and less specialist in their capabilities, or at least hold specialties in several subjects or areas. With this in mind, since this condition is likely to continue into the foreseeable future, I recommend:

Faculties of education revise their programs to make it possible for candidates to gain maximum flexibility in subject areas and school levels.

Since the "persons-oriented" programs of the faculties can, and indeed often have, prepared teacher graduates for useful vocations outside formal classroom teaching, I recommend:

Faculties of education be encouraged to diversify their programs to graduate persons who are qualified for

education-related roles other than classroom teachers. Such areas might include day-care workers, welfare and social workers, nursery school teachers, education in third world countries, e.g., CUSO workers, education officers for industrial and commercial firms, for penal systems and for community literacy and adult education programs.

To facilitate such diversification I recommend:

Faculties be permitted greater freedom and flexibility in placing their students for the practicums associated with their programs and be encouraged to diversify this aspect of the training program.

I also recommend:

When a faculty develops a diversified program of the kind mentioned above and when it meets with the approval of the Ministry of Education and the Ministry of Universities and Colleges, it be granted an additional admission quota above the basic pre-service quota referred to in earlier recommendations.

Since we are committed to a bilingual Canada, we must do a better job of teaching French to English-speaking students and English to French-speaking students than we do at present, even during a period of declining school enrolments. We can succeed in doing so only by special efforts, beginning with teacher education. To do this and yet conserve our resources during these difficult years I recommend:

One of the faculties of education be turned into a centre for the training of bilingual teachers for all the schools of Ontario. Such a school could become a microcosm in which candidates from both language backgrounds could live and work in a truly bilingual community. Such a faculty would need to be located in a community which provides easy access to both languages and cultures.

Keeping in mind the needs of teachers who become surplus in one field, I recommend:

Faculties develop special programs so that redundant teachers can return to the faculties for retraining there or in another faculty of the university to gain qualifications in other fields where they may be required.

5.3 In-service Education and Professional Development

As noted several times earlier in this report, throughout the investigations and hearings conducted by the Commission there was a recurring theme that faculties of education, with their specially recruited expertise, should play a wider role in in-service and continuing education.¹ It was natural that the report from the Association of Deans of Education, presented through the Council of Ontario Universities, would stress this theme, as they did when they urged the development of specific plans to redirect their resources by increasing activities in the professional development of practising teachers. But teachers themselves also underline this need and call for a more active role by the faculties in in-service education. Both individually and through their associations, teachers continue to insist that they would take courses they perceived as being topical, relevant and matched to their needs. Such statements as these were received by the Commission:

"Faculties of education should direct their priorities more aggressively to in-service education. Their expert input as researchers, curriculum specialists, project coordinators and as professional development facilitators would be welcome."

"Teacher preparation institutes should be called upon to a much greater extent to fulfil existing needs in professional development."

In almost all the countries where the impact of declining school enrolments on teacher education was investigated, there are plans to seize the opportunity provided by a surplus of teachers to redirect the activities of the staffs of the training institutions toward helping teachers in the field. I am satisfied that this is not a case of "make-work" for unemployed faculty, or "feather-bedding" as it is known in labour union circles, but a genuine attempt to meet the largely unmet needs of practicing teachers.

¹Whether they can do so without a retraining program for at least some member of their staff is a moot point, and one on which I received conflicting advice. My opinion is that not all members of the faculty of education staffs can readily and easily transfer back and forth from pre-service to in-service education.

Much concern was expressed, both in Ontario and in other jurisdictions, over the large number of teachers who, once having obtained permanent certification, are reluctant to undertake further study for upgrading and updating or for simple "refresher" courses. It was pointed out that most of the teachers participating in in-service activities are the most dedicated and frequently the most competent ones who recognize their own needs to grow and keep up-to-date or who recognize that promotion in the system will depend upon how they improve their qualifications and skills. Given a wide public dissatisfaction with the work being done in the schools, now being rather freely expressed, many parents would undoubtedly welcome systematic and ongoing further education for all teachers.

No automatic and regular review of a teacher's right to hold a certificate has apparently been provided, or even contemplated on a general scale. I am aware of the existing judicial and quasi-judicial procedures which can lead to the loss of a teaching certificate or the suspension of it for a period of time. But this is a "penalty approach," far removed from the concept of continuing academic and professional improvement of the teacher's qualifications and hence, presumably, of performance. Educators are the ones above all others who must accept and practise the concept of continuing education throughout their lifetimes. This will not happen by itself or by chance; it must be deliberately fostered, as it is now in some other fields.

Concern has been expressed over the lack of adequate provincial programs for the gradual induction of the neophyte teacher during his first year, and indeed over the general lack of recognition of that need, except for a few school boards. In pre-service training there is only minimum contact with the classroom, which amounts to little preparation for acceptance of full responsibility for a group of students. Once a young person is graduated as a teacher he is, if he can find a job, thrust into a total responsibility for the students assigned to him, with little support other than the intermittent and hurried advice he can get from his colleagues or his principal. This lack is felt much longer than the first year of teaching. Some countries, e.g., West

Germany, devote much more time and resources than we do to the induction process in teacher education and several countries (e.g., Britain) are experimenting with new programs. Our current teacher surplus in Ontario provides us with an opportunity of adopting or developing an adequate induction program for our inexperienced teachers and for other teachers needing or desiring assistance of this kind if their job changes. Accordingly, I recommend:

The Ministry of Education accept the principle of an induction program for newly qualified teachers and request faculties of education to plan and offer these programs as a continuation of the practice teaching process.

Having considered these views and their consequences, I recommend:

The Ministry of Education abandon its long-standing policy of permanent certification of teachers in favour of a system of term certification which would be valid for five years and which would be renewable only upon satisfactory evidence of serious professional development activity (at least the equivalent of a six-week course) during the preceding period. The primary criteria for renewal would be evidence of continuing professional development and growth, not only through the attainment of further academic and professional qualifications, but through evidence of satisfactory and improving performance on the job (whether or not it be classroom teaching).

I further recommend:

Each faculty of education and OISE be encouraged to develop a substantial program of in-service and professional development offerings for practising teachers, including the induction program specified in a previous recommendation. This could be accomplished by the ministries agreeing to fund a certain percentage (e.g., 20%) of current faculty complement for a specific and approved in-service education function, as is done in Scotland. Alternatively, but more indirectly, this could be accomplished by the development of a suitable formula for funding in-service activities on a full-time equivalent basis on the same scale as pre-service activities. Of the two funding methods, I prefer the latter and recommend its adoption.

To facilitate an orderly development of in-service programs, there will have to be some systematic organization and plan. I recommend:

Each of the universities with a faculty of education and OISE be encouraged, perhaps through funding incentives, to establish a diploma or degree program in continuing education, toward which various units of in-service offerings could be presented for credit. Enrolments in such diploma or degree courses be funded on the formula referred to in the immediately preceding recommendation.

I recommend, in conjunction with the above:

All units creditable towards a diploma or degree in continuing education be approved by the appropriate university senate, it being understood that such units for credit towards the diploma only do not need to follow the usual full course or half course patterns common in most other faculties. To make in-service training accessible to as many teachers as possible, units which might be equivalent to fifth courses or quarter courses be permissible towards obtaining the diploma.

While I recognize the problems entailed, I hope that equivalent forms of flexibility can be built into the courses leading to a degree in continuing education.

Keeping in mind the healthy scepticism of many teachers, not only in Ontario but in many of the other jurisdictions which we investigated, of the rather esoteric nature of some of the in-service offerings of training colleges, I recommend:

In planning programs of continuing education, faculties of education and OISE seek the advice and participation of competent experienced teachers and administrators along with input from their own faculty members.

Joint planning is essential to the success of any in-service program. Acceptance by all university faculty of the legitimacy of two-way communication between teachers and faculties of education would do much to reduce the mistrust and scepticism with which many in the teaching profession view any activity emanating from university planning.

In order to make resources within the faculties and OISE available to teachers for short professional development activities and consultations,

which is an equally important aspect of the in-service training program, I recommend:

The Ministry agree to fund a certain percentage (say 10%) of current faculty complement at a faculty of education or at OISE for a specific and approved development consultative service to the school system.

I also recommend:

The incidental expenses involved in the presentation of the short professional development activities mentioned in the preceding recommendation (excluding, of course, stipends for faculty members, which should not be necessary) should be covered by fees paid by the participating teachers.

If it becomes policy that proof of continuing education becomes a requirement for renewal of certification, then the provision of such large-scale in-service programs will need to take place throughout the year. In order that teachers may be released for such courses, I recommend:

Boards of education be encouraged, where necessary, to maintain pools of relief teachers to release teachers for required in-service activities.

As teachers become redundant in a shrinking system, some at least could be placed on such a relief roster. I recommend:

First year contracts for the hiring of inexperienced teachers be for less than full-time teaching duties (perhaps 1/2 or 2/3 contracts with appropriate fractional salaries) and that first year teachers be required to participate in induction programs and seminars organized (in cooperation with the Ministry of Education and teachers' federations) by faculties of education and OISE.

Recognizing the tightness of many teachers' schedules, I recommend:

Whenever possible and keeping in mind the need of access to special resources, faculties of education and OISE be encouraged to take their in-service offerings off campus to centres more accessible to many of their teacher clients. This applies particularly to the needs of teachers in Northern Ontario.

5.4 General Recommendations

Perhaps one of the greatest problems in teacher education in Ontario has been the lack of a consultative body where representatives of all interested groups (i.e., the Ministry of Education, the Ministry of Universities and Colleges, the faculties and colleges of education, OISE, the teachers' federations, the school administrators, the trustees, etc.) could look openly at issues affecting the development of teachers and advise the government on policies to be adopted. At times in the recent past in Ontario one ministry did not seem to understand the policies of the other ministry. Various interest groups have approached a Minister with resulting suspicion and mistrust on the part of other interest groups of the kind of advice being given to the Minister. It seems to me essential that the government take the lead in creating such a body to add credibility to the policies the Ministry makes following wide consultation. I recommend, therefore:

The Ministries of Education and Universities and Colleges take steps to set up an Advisory Committee on the Supply and Training of Teachers, on which all appropriate interested parties be represented.¹

Many teachers are anxious that cutbacks in teacher training faculties and at OISE not affect adversely the provision and development of graduate studies in education. Recognizing that the growth of graduate studies in education over the last decade has been needed, that it is widely appreciated by the teaching profession and that the needs continue and will become larger, I recommend:

Faculties of education and OISE be encouraged to maintain their programs in graduate studies in education at least at the current levels of admissions.

After many years of embarrassingly limited graduate programs, which forced our students to attend universities in foreign countries, we have at last developed a program of graduate education of which we can be justifiably proud. We must not lose what we have gained.

¹The recently approved Ontario Teacher Education Forum is a move in the right direction and with some modifications it might become the nucleus of such an advisory committee.

Because of the pressures of pre-service instruction, most of the faculties of education have not felt able to undertake the amount of research they have wanted to do and for which they have many qualified staff members. Now that pre-service requirements will be considerably curtailed, faculties should be able and willing to take on a larger share of applied education research. Since this is a legitimate university role, which should strengthen not only the faculty itself but benefit the school system as a whole, I recommend:

Faculties of education and OISE be encouraged to expand their activities in education research, and all staff members have equal rights to apply for contract research funds and general research funds provided by ministries and other granting bodies.

If, in making its decisions for the future of pre-service and in-service teacher education, the government decides that it must close out certain colleges or faculties, or if in reducing the scale of operations redundancies occur for some staff, then it may be argued that some provision should be made by the government for compensation of those persons whose careers are so affected. In Europe¹ (in England, Scotland, Sweden, Denmark and Germany), it is accepted that the government has a responsibility to carry the salaries of all persons regularly employed in teacher education whose careers are dislocated by decisions of the government and who are unable to find alternative suitable employment (see this Commission's Information Bulletin #10 by Dr. V. Ready on Crombie Compensations in England). If salaries are not guaranteed, then reasonable severance payments or retraining grants and other assistance in securing employment is provided. I therefore recommend:

The Ministries consider the development of an appropriate policy of compensation for all those in teacher education who become redundant because of Ministry decision and who are unable, even with assistance, to find reasonably equivalent alternative employment.

I am not convinced that under our circumstances salary continuation policy without limit is justified. I would insist, however, that some form of compensation and assistance in securing alternative forms of

¹The faculty members and teachers there are frequently civil servants.

employment is not only justified but a right the employee can expect. This is a general problem which will face other university faculties and may have to be settled within the university system as part of some general agreement with government.

Appendix 5.A

The cumulative effect of these recommendations will be a smaller teacher education capacity for Ontario, and within this reduced capacity a major shift away from pre-service teaching toward in-service and professional development activities (including induction procedures for new teachers) and toward diversified education-related programs and research. A hypothetical application of these recommendations to a faculty might produce the following result:

Current Budget

Pre-Service Course Funding	- 80%	\$ 1,600,000
In-Service Course Funding	- 10%	200,000
Graduate Studies	- 10%	<u>200,000</u>
		\$ 2,000,000

Assuming a decision by government to cut back teacher education spending by 20% (constant dollars) a new budget might assume this form:

New Budget

(based on application of recommendations in this report)

Pre-Service Funding	- 50.0%	\$ 800,000	
In-Service Funding	- 20.0%	320,000	
Graduate Studies	- 12.5%	200,000	(maintained at current level)
Diversified Programs	- 7.5%	120,000	
Research	- 10.0%	<u>160,000</u>	
		\$ 1,600,000	

Such an allocation shows a sharp decline in pre-service activity, which would be in line with new teacher requirements. It also shows how, with guaranteed financial support from the ministries, the talents of the faculty could be put to effective and much needed continuing support for the profession. It would permit the faculty to maintain the essential nucleus of tenured staff needed to maintain quality programs. Other staff, as needed, could be seconded or added on short-term appointments. Such an arrangement would also provide flexibility to meet unexpected shifts in demand from one sector of faculty activity to another.

Appendix 5.B

Tables of FLEXOR Teacher Education Computer Model Simulations

TABLE 5.8.1
PROJECTIONS OF ONTARIO TEACHER EDUCATION REQUIREMENTS, ADMISSIONS AND COSTS, 1978 TO 2001:
SIMULATION NO. 12

YEAR	GRADUATES REQUIRED AS NEW TEACHERS				ADMISSIONS (PRE-SERVICE)/GRADUATE HIRED				A D M I S S I O N S										C O S T S																	
	ELEMENTARY		SECONDARY		COMBINED		RATIO		ELEMENTARY		SECONDARY		COMBINED		RATIO		TOTAL		PRESERVICE		INSERVICE		TOTAL		ELEMENTARY		SECONDARY		COMBINED		TOTAL OPERATING COSTS		COST PER STUDENT		COST/GRADUATE HIRED	
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	
1977	1,300	1,350	2,650	2.14	2.16	2.782	500	3,282	2,916	523	3,439	1,023	1,023	1,023	1,023	1,023	15,600,000	16,800,000	32,400,000	4,753	4,885	4,821	10,673	13,666	12,041											
1978	1,278	1,075	2,353	1.77	2.08	2,262	537	2,799	2,236	561	2,797	4,498	1,098	1,098	1,098	1,098	15,132,000	16,226,000	31,428,000	5,407	5,826	5,616	12,412	19,194	15,184											
1979	1,020	704	1,725	1.40	2.00	1,429	574	2,003	1,408	599	2,007	2,837	1,173	1,173	1,173	1,173	14,678,040	15,807,120	30,485,160	7,329	7,875	7,602	12,334	36,983	18,783											
1980	890	315	1,205	1.40	2.00	1,246	611	1,857	630	637	1,267	1,875	1,248	1,248	1,248	1,248	14,237,699	15,332,906	29,570,605	7,669	12,104	9,467	15,981	44,911	23,242											
1981	627	183	809	1.40	2.00	877	648	1,525	365	775	1,040	1,242	1,323	1,323	1,323	1,323	13,810,568	14,872,919	28,683,487	9,055	14,298	11,181	11,589	70,878	18,460											
1982	722	80	802	1.40	2.00	1,011	685	1,696	160	713	873	1,171	1,398	1,398	1,398	1,398	13,396,251	14,426,732	27,822,983	7,898	16,530	10,831	11,272	71,910	17,232											
1983	738	40	778	1.40	2.00	1,034	722	1,756	80	751	831	1,114	1,473	1,473	1,473	1,473	12,993,363	13,993,930	26,988,293	7,402	16,840	10,434	13,703	28,044	19,351											
1984	577	52	629	1.40	2.00	808	759	1,567	104	780	893	912	1,548	1,548	1,548	1,548	12,604,532	13,574,112	26,178,644	8,043	15,208	10,643	11,871	8,790	13,390											
1985	564	189	753	1.40	2.00	790	796	1,586	378	827	1,205	1,168	1,623	1,623	1,623	1,623	12,226,396	13,166,888	25,393,285	7,711	10,923	9,099	9,802	21,755	13,120											
1986	634	195	829	1.40	2.00	887	833	1,720	391	865	1,256	1,278	1,698	1,698	1,698	1,698	11,859,604	12,771,882	24,631,486	6,893	10,171	8,276	9,110	17,286	11,744											
1987	678	233	911	1.40	2.00	949	833	1,782	466	865	1,331	1,415	1,698	1,698	1,698	1,698	11,563,114	12,452,585	24,015,699	6,488	9,354	7,713	8,537	21,445	11,806											
1988	721	203	925	1.40	2.00	1,010	833	1,843	407	865	1,272	1,417	1,698	1,698	1,698	1,698	11,331,852	12,203,533	23,535,385	6,149	9,596	7,556	8,644	23,885	12,135											
1989	718	163	882	1.40	2.00	1,006	833	1,839	327	865	1,192	1,333	1,698	1,698	1,698	1,698	11,161,874	12,020,480	23,182,354	6,070	10,086	7,649	7,980	29,193	11,610											
1990	765	113	878	1.40	2.00	1,071	833	1,904	226	865	1,091	1,297	1,698	1,698	1,698	1,698	11,050,255	11,900,275	22,950,531	5,803	10,909	7,663	8,306	12,474	10,507											
1991	748	198	946	1.40	2.00	1,048	833	1,881	395	865	1,260	1,443	1,698	1,698	1,698	1,698	10,995,004	11,840,774	22,835,778	5,846	9,397	7,271	8,108	15,551	10,552											
1992	755	239	994	1.40	2.00	1,058	833	1,891	477	865	1,342	1,535	1,698	1,698	1,698	1,698	10,995,004	11,840,774	22,835,778	5,815	8,821	7,063	8,247	14,828	10,529											
1993	746	284	1,030	1.40	2.00	1,044	833	1,877	568	865	1,433	1,612	1,698	1,698	1,698	1,698	11,049,979	11,899,978	22,949,957	5,887	8,304	6,933	8,226	16,909	10,892											
1994	747	279	1,026	1.40	2.00	1,046	833	1,879	558	865	1,423	1,604	1,698	1,698	1,698	1,698	11,138,379	11,995,178	23,133,557	5,927	8,430	7,006	8,438	14,545	10,619											
1995	735	323	1,058	1.40	2.00	1,029	833	1,862	647	865	1,517	1,676	1,698	1,698	1,698	1,698	11,238,624	12,103,134	23,341,759	6,036	8,006	6,919	8,367	16,866	11,050											
1996	742	307	1,049	1.40	2.00	1,039	833	1,872	614	865	1,479	1,653	1,698	1,698	1,698	1,698	11,351,011	12,224,166	23,575,176	6,063	8,265	7,035	8,390	16,423	10,972											
1997	751	309	1,060	1.40	2.00	1,051	833	1,884	618	865	1,483	1,669	1,698	1,698	1,698	1,698	11,464,521	12,346,407	23,810,928	6,084	8,325	7,071	8,726	16,917	11,382											
1998	733	304	1,037	1.40	2.00	1,026	833	1,859	608	865	1,473	1,634	1,698	1,698	1,698	1,698	11,579,166	12,469,872	24,049,038	6,228	8,464	7,217	9,021	15,514	11,338											
1999	708	332	1,040	1.40	2.00	992	833	1,825	664	865	1,529	1,656	1,698	1,698	1,698	1,698	11,694,958	12,594,570	24,289,528	6,409	8,239	7,243	9,109	16,536	11,658											
2000	698	331	1,029	1.40	2.00	977	833	1,810	661	865	1,526	1,638	1,698	1,698	1,698	1,698	11,811,907	12,720,516	24,532,424	6,526	8,334	7,353	9,242	16,599	11,788											
2001	690	332	1,022	1.40	2.00	966	833	1,799	664	865	1,529	1,630	1,698	1,698	1,698	1,698	11,930,026	12,847,721	24,777,748	6,632	8,402	7,445	---	---	---											

SOURCE: THE HANSEN GROUP
DETAILED REPORTS OF SIMULATION EXPERIMENTS 1-19
THE FUTURE FOR TEACHER EDUCATION IN ONTARIO

TABLE 5.B.2
PROJECTIONS OF ONTARIO TEACHER EDUCATION REQUIREMENTS, ADMISSIONS AND COSTS, 1978 TO 2001:
SIMULATION NO. 13

YEAR	A D M I S S I O N S										C O S T S									
	GRADUATES REQUIRED AS NEW TEACHERS					ADMISSIONS (PRE-SERVICE)/GRADUATE HIRED					TOTAL OPERATING COSTS					COST PER STUDENT				
	ELEMANTARY		SECONDARY		COMBINED	ELEMANTARY		SECONDARY		COMBINED	ELEMANTARY		SECONDARY		COMBINED	ELEMANTARY		SECONDARY		COMBINED
	NO.	NO.	NO.	NO.		PRE-SERVICE	INSERVICE	PRE-SERVICE	INSERVICE		NO.	NO.	NO.	NO.		NO.	NO.	NO.	NO.	
1977	1,500	1,350	2,650	2,14	2.15	2,782	500	3,282	2,916	523	3,439	5,698	1,023	6,721	15,600,000	16,800,000	32,400,000	4,753	4,885	4,821
1978	1,278	1,075	2,353	1.86	1.85	2,356	537	2,893	1,996	561	2,557	4,352	1,098	5,450	15,132,000	16,296,000	31,428,000	5,231	6,373	5,767
1979	1,020	704	1,775	1.55	1.55	1,578	574	2,152	1,094	599	1,693	2,672	1,173	3,845	14,678,040	15,807,120	30,485,160	6,820	9,338	7,928
1980	890	315	1,205	1.25	1.25	1,112	611	1,723	394	637	1,031	1,506	1,248	2,754	14,237,699	15,332,906	29,570,605	8,262	14,877	10,738
1981	627	183	809	1.25	1.25	783	648	1,431	228	675	903	1,011	1,323	2,334	13,810,568	14,872,919	28,683,487	9,649	16,466	12,287
1982	722	80	802	1.25	1.25	903	685	1,588	100	713	813	1,003	1,398	2,401	13,396,251	14,426,732	27,822,983	8,437	17,748	11,590
1983	738	40	778	1.25	1.25	923	722	1,645	50	751	801	973	1,473	2,446	12,994,363	13,993,930	26,988,293	7,900	17,471	11,034
1984	577	52	629	1.25	1.25	722	759	1,481	65	789	844	786	1,548	2,334	12,604,332	13,574,112	26,178,444	8,513	15,900	11,214
1985	564	189	753	1.25	1.25	705	796	1,501	237	827	1,064	941	1,623	2,564	12,226,396	13,166,888	25,393,285	8,146	12,381	9,902
1986	634	195	829	1.25	1.25	792	833	1,625	244	865	1,109	1,037	1,698	2,735	11,859,604	12,771,882	24,631,486	7,297	11,514	9,008
1987	678	233	911	1.25	1.25	848	833	1,681	291	865	1,156	1,139	1,698	2,837	11,563,114	12,452,585	24,015,699	6,880	10,769	8,465
1988	721	203	925	1.25	1.25	902	833	1,735	254	865	1,119	1,156	1,698	2,854	11,331,852	12,203,533	23,535,385	6,532	10,904	8,247
1989	718	163	882	1.25	1.25	898	833	1,731	204	865	1,069	1,102	1,698	2,800	11,161,874	12,020,480	23,182,354	6,448	11,242	8,279
1990	765	113	878	1.25	1.25	956	833	1,789	141	865	1,006	1,097	1,698	2,795	11,050,255	11,900,275	22,950,531	6,176	11,828	8,210
1991	748	198	946	1.25	1.25	936	833	1,769	247	865	1,112	1,182	1,698	2,880	10,995,004	11,840,774	22,835,778	6,217	10,649	7,928
1992	755	239	994	1.25	1.25	944	833	1,777	298	865	1,163	1,243	1,698	2,941	10,995,004	11,840,774	22,835,778	6,186	10,178	7,765
1993	746	284	1,030	1.25	1.25	932	833	1,765	355	865	1,220	1,287	1,698	2,985	11,049,979	11,899,978	22,949,957	6,260	9,754	7,688
1994	747	279	1,026	1.25	1.25	934	833	1,767	349	865	1,214	1,283	1,698	2,981	11,138,379	11,995,178	23,133,557	6,303	9,883	7,761
1995	735	323	1,058	1.25	1.25	919	833	1,752	404	865	1,269	1,323	1,698	3,021	11,238,624	12,103,134	23,341,759	6,416	9,556	7,727
1996	742	307	1,049	1.25	1.25	928	833	1,761	384	865	1,249	1,311	1,698	3,009	11,351,011	12,224,166	23,575,176	6,447	9,789	7,834
1997	751	309	1,060	1.25	1.25	939	833	1,772	386	865	1,251	1,325	1,698	3,023	11,464,521	12,346,407	23,810,928	6,471	9,867	7,877
1998	733	304	1,037	1.25	1.25	916	833	1,749	380	865	1,245	1,296	1,698	2,994	11,579,166	12,469,872	24,049,038	6,520	10,015	9,031
1999	708	332	1,040	1.25	1.25	886	833	1,719	415	865	1,280	1,300	1,698	2,998	11,694,958	12,594,570	24,289,528	6,805	9,841	8,101
2000	692	331	1,029	1.25	1.25	872	833	1,705	413	865	1,278	1,286	1,698	2,984	11,811,907	12,720,516	24,532,424	6,926	9,951	8,222
2001	690	332	1,022	1.25	1.25	862	833	1,695	415	865	1,280	1,277	1,698	2,975	11,930,026	12,847,721	24,777,748	7,037	10,337	8,327

SOURCE: THE HANSEN GROUP
DETAILED REPORTS OF SIMULATION EXPERIMENTS 1-19
THE FUTURE FOR TEACHER EDUCATION IN ONTARIO

TABLE 5 B.3
PROJECTIONS OF ONTARIO TEACHER EDUCATION REQUIREMENTS, ADMISSIONS AND COSTS, 1978 TO 2001:
SIMULATION NO. 14

YEAR	GRADUATES REQUIRED AS NEW TEACHERS				ADMISSIONS (PRE-SERVICE)/GRADUATE HIRED				ADMISSIONS				TOTAL OPERATING COSTS				COST PER STUDENT				COST/GRADUATE HIRED			
	ELEMENTARY		SECONDARY		ELEMENTARY		SECONDARY		ELEMENTARY		SECONDARY		ELEMENTARY		SECONDARY		ELEMENTARY		SECONDARY		ELEMENTARY		SECONDARY	
	NO.	NO.	RATIO	RATIO	NO.	NO.	NO.	NO.	TOTAL	INSERVICE	NO.	NO.	TOTAL	INSERVICE	NO.	NO.	TOTAL	ELEMENTARY	SECONDARY	COMBINED	TOTAL	ELEMENTARY	SECONDARY	COMBINED
1977	1,300	1,350	2,650	2.14	2.15	2,782	500	3,282	2,916	523	3,439	5,698	1,023	6,721	15,600,000	16,800,000	32,400,000	4,753	4,885	4,821	10,673	13,666	12,041	13,666
1978	1,278	1,075	2,353	1.77	1.91	2,262	537	2,799	2,236	561	2,797	4,498	1,098	5,596	15,132,000	16,296,000	31,428,000	5,407	5,826	5,616	12,412	19,194	15,184	15,184
1979	1,020	704	1,725	1.40	1.64	1,429	574	2,003	1,408	599	2,007	2,837	1,173	4,010	14,678,040	15,807,120	30,485,160	7,329	7,875	7,602	12,334	36,983	18,783	18,783
1980	890	315	1,205	1.40	1.56	1,246	611	1,857	630	637	1,267	1,875	1,248	3,123	14,237,699	15,332,906	29,570,605	7,669	12,104	9,467	15,981	44,911	23,242	23,242
1981	627	183	809	1.40	1.54	877	648	1,525	365	675	1,040	1,242	1,323	2,565	13,810,568	14,872,919	28,683,487	9,055	14,298	11,181	11,589	70,878	18,460	18,460
1982	722	80	802	1.40	1.46	1,011	685	1,696	160	713	873	1,171	1,398	2,569	13,396,251	14,426,732	27,822,983	7,898	16,530	10,831	11,272	71,901	17,232	17,232
1983	738	40	778	1.40	1.43	1,034	722	1,756	80	751	831	1,114	1,473	2,587	12,994,363	13,993,930	26,988,293	7,402	16,840	10,434	13,703	28,044	19,351	19,351
1984	577	52	629	1.40	1.45	808	759	1,567	104	789	893	912	1,548	2,460	12,604,532	13,574,112	26,178,644	8,043	15,208	10,643	11,871	8,790	13,390	13,390
1985	564	189	753	1.40	1.55	790	796	1,586	378	827	1,205	1,168	1,623	2,791	12,226,396	13,166,888	25,393,285	7,711	10,923	9,099	9,477	21,755	12,785	12,785
1986	656	195	851	1.40	1.54	918	833	1,751	391	865	1,256	1,309	1,698	3,007	11,859,604	12,771,882	24,631,486	6,774	10,171	8,193	9,111	17,286	11,760	11,760
1987	689	233	922	1.40	1.55	964	833	1,797	466	865	1,331	1,431	1,698	3,129	11,622,412	12,516,444	24,138,856	6,466	9,402	7,715	8,153	21,555	11,400	11,400
1988	765	203	968	1.40	1.53	1,071	833	1,904	407	865	1,272	1,478	1,698	3,176	11,506,188	12,391,280	23,897,468	6,044	9,744	7,525	8,371	24,252	11,873	11,873
1989	773	163	937	1.40	1.50	1,082	833	1,915	327	865	1,192	1,409	1,698	3,107	11,506,188	12,391,280	23,897,468	6,007	10,397	7,691	7,622	30,093	11,220	11,220
1990	853	113	966	1.40	1.47	1,194	833	2,027	226	865	1,091	1,420	1,698	3,118	11,552,213	12,440,845	23,993,058	5,698	11,405	7,695	8,022	13,040	10,448	10,448
1991	848	198	1,046	1.40	1.51	1,188	833	2,021	395	865	1,260	1,583	1,698	3,281	11,609,974	12,503,049	24,113,023	5,746	9,923	7,350	7,575	16,014	10,154	10,154
1992	901	245	1,146	1.40	1.53	1,261	833	2,094	490	865	1,355	1,751	1,698	3,449	11,679,634	12,578,067	24,257,701	5,577	9,286	7,034	7,596	15,351	10,077	10,077
1993	926	296	1,222	1.40	1.55	1,296	833	2,129	592	865	1,457	1,889	1,698	3,587	11,761,391	12,666,114	24,427,504	5,523	8,692	6,811	7,441	16,312	10,066	10,066
1994	962	316	1,278	1.40	1.55	1,347	833	2,180	631	865	1,496	1,978	1,698	3,676	11,855,482	12,767,443	24,622,924	5,438	8,534	6,698	7,525	12,592	9,456	9,456
1995	974	428	1,401	1.40	1.58	1,363	833	2,196	855	865	1,720	2,218	1,698	3,916	11,962,181	12,882,350	24,844,531	5,447	7,488	6,344	7,837	13,494	9,897	9,897
1996	947	475	1,422	1.40	1.60	1,326	833	2,159	949	865	1,814	2,276	1,698	3,974	12,031,603	13,011,173	25,092,977	5,595	7,171	6,315	7,492	14,822	9,912	9,912
1997	990	459	1,450	1.40	1.59	1,387	833	2,220	919	865	1,784	2,395	1,698	4,003	12,002,621	13,141,285	25,343,906	5,497	7,368	6,331	7,572	13,050	9,568	9,568
1998	1,007	519	1,525	1.40	1.60	1,409	833	2,242	1,037	865	1,902	2,447	1,698	4,145	12,324,648	13,272,698	25,597,345	5,496	6,977	6,176	7,458	12,629	9,375	9,375
1999	1,039	573	1,612	1.40	1.61	1,454	833	2,287	1,146	865	2,011	2,600	1,698	4,298	12,447,894	13,405,425	25,853,319	5,443	6,666	6,015	7,229	11,988	9,079	9,079
2000	1,095	637	1,732	1.40	1.62	1,533	833	2,366	1,275	865	2,140	2,807	1,698	4,505	12,572,373	13,539,479	26,111,852	5,314	6,328	5,796	7,000	11,768	8,799	8,799
2001	1,164	685	1,849	1.40	1.62	1,629	833	2,462	1,371	865	2,236	3,000	1,698	4,698	12,698,097	13,674,874	26,372,971	5,157	6,116	5,614	---	---	---	---

SOURCE:
THE HANSEN GROUP
DETAILED REPORTS OF SIMULATION EXPERIMENTS 1-19
THE FUTURE FOR TEACHER EDUCATION IN ONTARIO

TABLE 5.8.4
PROJECTIONS OF ONTARIO TEACHER EDUCATION REQUIREMENTS, ADMISSIONS AND COSTS, 1978 TO 2001:
SIMULATION NO. 15

YEAR	GRADUATES REQUIRED AS NEW TEACHERS				ADMISSIONS (PRE-SERVICE)/GRADUATE HIRED				ADM I S S I O N S				C O S T S			
	ELEMENTARY		SECONDARY		ELEMENTARY		SECONDARY		ELEMENTARY		SECONDARY		TOTAL OPERATING COSTS		COST PER STUDENT	
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	ELEMENTARY	SECONDARY	COMBINED	COMBINED
1977	1,300	1,350	2,650	2,14	2,782	500	3,282	2,916	523	3,439	5,698	1,023	15,600,000	16,800,000	32,400,000	10,673
1978	1,278	1,075	2,353	1.84	2,356	537	2,893	1,966	561	2,557	4,352	1,098	15,132,000	16,296,000	31,428,000	12,493
1979	1,020	704	1,725	1.55	1,578	574	2,152	1,094	599	1,693	2,672	1,173	14,678,040	15,807,120	30,485,160	12,637
1980	890	315	1,205	1.25	1,112	611	1,723	394	637	1,031	1,506	1,248	14,237,699	15,352,906	29,570,605	10,738
1981	627	183	809	1.25	783	648	1,431	228	675	903	1,011	1,323	13,810,568	14,872,919	28,683,487	11,065
1982	722	80	802	1.25	903	685	1,588	100	713	813	1,003	1,398	13,396,251	14,426,732	27,822,983	11,590
1983	738	40	778	1.25	923	722	1,645	50	751	801	973	1,473	12,994,363	13,993,930	26,988,293	11,034
1984	577	52	629	1.25	722	759	1,481	65	789	854	786	1,548	12,604,532	13,574,112	26,178,644	11,214
1985	564	189	753	1.25	705	796	1,501	237	827	1,064	941	1,623	12,226,396	13,166,888	25,393,285	11,240
1986	656	195	851	1.25	819	833	1,652	244	865	1,109	1,064	1,698	11,859,604	12,771,882	24,631,486	11,514
1987	689	233	922	1.25	861	833	1,694	291	865	1,156	1,153	1,698	11,622,412	12,516,444	24,138,856	10,824
1988	765	203	968	1.25	956	833	1,789	254	865	1,119	1,210	1,698	11,506,188	12,391,280	23,897,468	11,071
1989	773	163	937	1.25	966	833	1,799	204	865	1,069	1,171	1,698	11,506,188	12,391,280	23,897,468	11,589
1990	853	113	966	1.25	1,066	833	1,899	141	865	1,006	1,207	1,698	11,552,213	12,440,845	23,993,058	12,365
1991	848	198	1,046	1.25	1,060	833	1,893	247	865	1,112	1,307	1,698	11,609,974	12,503,049	24,113,023	11,245
1992	901	245	1,146	1.25	1,126	833	1,959	306	865	1,171	1,432	1,698	11,679,634	12,578,067	24,257,701	10,742
1993	926	296	1,222	1.25	1,157	833	1,990	370	865	1,235	1,528	1,698	11,761,391	12,666,114	24,427,504	10,255
1994	962	316	1,278	1.25	1,203	833	2,036	344	865	1,259	1,597	1,698	11,855,482	12,767,443	24,622,924	10,137
1995	974	428	1,401	1.25	1,217	833	2,050	535	865	1,400	1,752	1,698	11,962,181	12,882,350	24,844,531	9,204
1996	947	475	1,422	1.25	1,184	833	2,017	593	865	1,458	1,777	1,698	12,081,803	13,011,173	25,092,977	8,922
1997	990	459	1,450	1.25	1,238	833	2,071	574	865	1,439	1,812	1,698	12,202,621	13,141,285	25,343,906	8,931
1998	1,007	519	1,525	1.25	1,258	833	2,091	648	865	1,513	1,907	1,698	12,324,648	13,272,698	25,597,345	8,771
1999	1,039	573	1,612	1.25	1,298	833	2,131	716	865	1,581	2,015	1,698	12,472,894	13,405,425	25,878,319	8,477
2000	1,095	637	1,732	1.25	1,369	833	2,202	797	865	1,662	2,165	1,698	12,572,373	13,539,479	26,111,852	8,148
2001	1,164	685	1,849	1.25	1,455	833	2,288	857	865	1,722	2,311	1,698	12,698,097	13,674,874	26,372,971	7,942

SOURCE: THE HANSEN GROUP
DETAILED REPORTS OF SIMULATION EXPERIMENTS 1-13
THE FUTURE FOR TEACHER EDUCATION IN ONTARIO

TABLE 5.B.5
PROJECTIONS OF ONTARIO TEACHER EDUCATION REQUIREMENTS, ADMISSIONS AND COSTS, 1978 TO 2001:
SIMULATION NO. 16

YEAR	GRADUATES REQUIRED AS NEW TEACHERS				ADMISSIONS (PRE-SERVICE)/ GRADUATE HIRED				A D M I S S I O N S				C O S T S									
	ELEMENTARY		SECONDARY		COMBINED		RATIO		ELEMENTARY		SECONDARY		COMBINED		RATIO		COST PER STUDENT		COST/GRADUATE HIRED			
	NO.		NO.		RATIO		RATIO		PRESERVICE		INSERVICE		TOTAL		COMBINED		ELEMENTARY		SECONDARY			
1977	1,300	1,350	2,650	2.15	2,782	500	3,282	2,916	523	3,439	5,698	1,023	6,721	15,600,000	16,800,000	32,400,000	4,753	4,885	4,821	10,673	13,666	12,041
1978	1,278	1,075	2,353	1.91	2,262	537	2,799	2,236	561	2,797	4,498	1,098	5,596	1,132,000	16,296,000	31,428,000	5,407	5,826	5,616	9,930	15,355	12,147
1979	1,276	880	2,156	1.64	1,786	574	2,360	1,760	599	2,359	3,546	1,173	4,719	14,678,040	15,807,120	30,485,160	6,220	6,790	6,460	7,794	23,423	11,882
1980	1,483	525	2,008	1.40	2,076	611	2,687	1,050	657	1,687	3,126	1,248	4,374	14,237,699	15,332,906	29,570,605	5,299	9,091	6,761	7,253	22,071	10,881
1981	1,567	456	2,023	1.40	2,193	648	2,841	913	675	1,588	3,106	1,323	4,429	13,810,568	14,872,919	28,683,487	4,861	9,366	6,476	6,070	45,114	10,404
1982	1,806	200	2,005	1.46	2,528	685	3,213	399	713	1,112	2,927	1,398	4,325	13,396,251	14,426,732	27,822,983	4,170	12,968	6,433	5,835	55,350	10,001
1983	1,846	100	1,946	1.40	2,584	722	3,306	200	751	951	2,784	1,473	4,257	12,994,363	13,993,930	26,988,293	3,931	14,715	6,340	7,162	29,267	11,542
1984	1,443	129	1,573	1.40	2,021	759	2,780	259	789	1,048	2,279	1,548	3,827	12,604,532	13,574,112	26,178,644	4,535	12,954	6,840	6,607	7,426	8,486
1985	1,410	473	1,883	1.40	1,974	796	2,770	946	827	1,773	2,920	1,623	4,543	12,226,396	13,166,888	25,393,285	4,414	7,426	5,590	5,562	14,658	7,987
1986	1,585	488	2,073	1.54	2,219	833	3,052	977	865	1,842	3,195	1,698	4,893	11,859,604	12,771,882	24,631,486	3,886	6,934	5,034	5,114	11,733	7,110
1987	1,695	583	2,278	1.55	2,373	833	3,206	1,166	865	2,031	3,539	1,692	5,237	11,563,114	12,452,585	24,015,699	3,606	6,133	4,586	4,746	14,059	7,019
1988	1,804	508	2,312	1.40	2,525	833	3,358	1,017	865	1,882	3,542	1,698	5,240	11,331,852	12,203,533	23,535,385	3,375	6,485	4,492	4,744	16,141	7,216
1989	1,796	409	2,205	1.51	2,514	833	3,347	817	865	1,682	3,332	1,698	5,030	11,161,874	12,020,480	23,182,354	3,334	7,146	4,609	4,383	20,685	6,996
1990	1,913	282	2,195	1.40	2,678	833	3,511	565	865	1,430	3,242	1,698	4,940	11,050,255	11,900,275	22,950,531	3,148	8,324	4,646	4,505	9,518	6,369
1991	1,871	494	2,365	1.53	2,619	833	3,452	988	865	1,853	3,607	1,698	5,305	10,995,004	11,840,774	22,835,778	3,185	6,392	4,305	4,417	10,577	6,247
1992	1,889	597	2,485	1.40	2,644	833	3,477	1,193	865	2,058	3,838	1,698	5,536	10,995,004	11,840,774	22,835,778	3,162	5,752	4,125	4,484	9,670	6,149
1993	1,865	710	2,575	1.40	2,610	833	3,443	1,420	865	2,285	4,030	1,698	5,728	11,049,979	11,899,978	22,949,957	3,209	5,208	4,006	4,484	10,604	6,294
1994	1,868	697	2,565	1.40	2,615	833	3,448	1,395	865	2,260	4,010	1,698	5,708	11,138,379	11,995,178	23,133,557	3,230	5,308	4,053	4,598	9,159	6,143
1995	1,837	808	2,646	1.40	2,572	833	3,405	1,617	865	2,402	4,189	1,698	5,887	11,238,624	12,103,134	23,341,759	3,301	4,877	3,965	4,575	10,274	6,332
1996	1,856	767	2,623	1.40	2,598	833	3,431	1,535	865	2,400	4,133	1,698	5,831	11,351,011	12,224,166	23,575,176	3,309	5,094	4,043	4,578	10,121	6,306
1997	1,877	772	2,628	1.40	2,628	833	3,461	1,545	865	2,410	4,173	1,698	5,871	11,464,521	12,346,407	23,810,928	3,312	5,123	4,055	4,751	10,410	6,528
1998	1,832	760	2,593	1.40	2,565	833	3,398	1,521	865	2,386	4,086	1,698	5,784	11,579,166	12,469,872	24,049,038	3,407	5,227	4,158	4,935	9,581	6,532
1999	1,771	830	2,601	1.40	2,480	833	3,313	1,659	865	2,524	4,139	1,698	5,837	11,694,958	12,594,570	24,289,528	3,530	4,989	4,161	5,018	10,014	6,698
2000	1,745	827	2,571	1.40	2,443	833	3,276	1,653	865	2,518	4,096	1,698	5,794	11,811,907	12,720,516	24,532,424	3,606	5,051	4,234	5,107	10,061	6,788
2001	1,725	830	2,555	1.40	2,415	833	3,248	1,660	865	2,525	4,075	1,698	5,773	11,930,026	12,847,721	24,777,748	3,673	5,088	4,292	---	---	---

SOURCE: THE HANSEN GROUP
DETAILED REPORTS OF SIMULATION EXPERIMENTS 1-19
THE FUTURE FOR TEACHER EDUCATION IN ONTARIO

TABLE 5.B.9
PROJECTIONS OF ONTARIO TEACHER EDUCATION REQUIREMENTS, ADMISSIONS AND COSTS, 1978 TO 2001:
SIMULATION NO. 20

YEAR	GRADUATES REQUIRED AS NEW TEACHERS						ADMISSIONS						COSTS					
	ELEMENTARY			SECONDARY			PRE-SERVICE			INSERVICE			TOTAL OPERATING COSTS			COST PER STUDENT		
	COMBINED			COMBINED			TOTAL			TOTAL			ELEMENTARY			ELEMENTARY		
	NO.	NO.	RATIO	NO.	NO.	RATIO	NO.	NO.	NO.	NO.	NO.	NO.	\$	\$	\$	\$	\$	\$
1977	1,300	1,350	2.650	2,782	500	3,282	2,916	523	3,439	1,023	5,598	6,721	15,600,000	16,800,000	32,400,000	4,753	4,885	10,673
1978	1,278	1,075	2,353	2,356	537	2,893	1,996	561	2,557	1,098	4,352	5,450	15,132,000	16,296,000	31,428,000	5,231	6,373	11,105
1979	1,148	792	1,940	1,776	574	2,350	1,231	599	1,830	1,173	3,006	4,179	14,678,000	15,807,120	30,485,160	6,247	8,640	9,730
1980	1,186	420	1,606	1,483	611	2,094	525	637	1,167	1,248	2,008	3,256	14,237,699	15,332,906	29,570,605	6,800	13,197	9,083
1981	1,097	320	1,416	1,371	648	2,019	399	675	1,074	1,323	1,770	3,093	13,810,568	14,872,919	28,683,487	6,841	13,843	9,273
1982	1,264	140	1,404	1,580	685	2,265	175	713	888	1,398	1,755	3,153	13,396,251	14,426,732	27,822,983	5,915	16,251	8,825
1983	1,292	70	1,362	1,615	722	2,337	88	751	839	1,473	1,702	3,175	12,994,363	13,993,930	26,988,293	5,560	16,689	9,114
1984	1,010	91	1,101	1,263	759	2,022	113	789	902	1,548	1,376	2,924	12,604,532	13,574,112	26,178,644	6,234	15,044	8,953
1985	987	331	1,318	1,234	796	2,030	414	827	1,241	1,623	1,648	3,271	12,226,396	13,166,888	25,393,285	6,024	10,611	7,764
1986	1,109	342	1,451	1,387	833	2,220	427	865	1,242	1,698	1,814	3,512	11,859,604	12,771,882	24,631,486	5,343	9,883	7,014
1987	1,187	408	1,595	1,483	833	2,316	510	865	1,375	1,698	1,993	3,691	11,563,114	12,452,585	24,015,699	4,992	9,057	6,506
1988	1,262	356	1,618	1,578	833	2,411	445	865	1,310	1,698	2,023	3,721	11,331,852	12,203,533	23,535,385	4,700	9,317	6,325
1989	1,257	286	1,543	1,572	833	2,405	357	865	1,222	1,698	1,929	3,627	11,161,874	12,020,480	23,182,354	4,642	9,833	6,392
1990	1,339	198	1,536	1,674	833	2,507	247	865	1,112	1,698	1,921	3,619	11,050,255	11,900,275	22,950,531	4,408	10,702	6,342
1991	1,310	346	1,655	1,637	833	2,470	432	865	1,297	1,698	2,065	3,767	10,995,004	11,840,774	22,835,778	4,451	9,129	6,062
1992	1,322	418	1,740	1,653	833	2,486	522	865	1,387	1,698	2,175	3,873	10,995,004	11,840,774	22,835,778	4,423	8,536	5,897
1993	1,305	497	1,802	1,631	833	2,464	621	865	1,486	1,698	2,253	3,951	11,049,979	11,899,978	22,949,957	4,484	8,007	5,809
1994	1,308	488	1,796	1,635	833	2,468	610	865	1,475	1,698	2,245	3,943	11,138,379	11,995,178	23,133,557	4,514	8,131	5,867
1995	1,286	566	1,852	1,608	833	2,441	707	865	1,572	1,698	2,315	4,033	11,238,624	12,103,134	23,341,759	4,605	7,698	5,817
1996	1,299	537	1,836	1,624	833	2,457	672	865	1,537	1,698	2,295	3,993	11,351,011	12,224,166	23,575,176	4,621	7,956	5,994
1997	1,314	541	1,855	1,643	833	2,476	676	865	1,541	1,698	2,314	4,017	11,464,521	12,346,407	23,810,928	4,631	8,012	5,928
1998	1,283	532	1,815	1,603	833	2,436	665	865	1,530	1,698	2,269	3,967	11,579,166	12,469,872	24,049,038	4,753	8,149	6,063
1999	1,240	581	1,821	1,550	833	2,383	726	865	1,591	1,698	2,276	3,974	11,694,958	12,594,516	24,289,528	4,908	7,917	6,113
2000	1,271	579	1,800	1,527	833	2,360	723	865	1,588	1,698	2,270	3,948	11,811,907	12,720,570	24,532,424	5,006	8,009	6,214
2001	1,297	581	1,788	1,509	833	2,342	726	865	1,591	1,698	2,235	3,933	11,930,022	12,847,721	24,777,748	5,094	8,074	6,299

SOURCE: THE HANSEN GROUP
DETAILED REPORTS OF SIMULATION EXPERIMENTS 1-19
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TABLE 5.B.10
PROJECTIONS OF ONTARIO TEACHER EDUCATION REQUIREMENTS, ADMISSIONS AND COSTS, 1978 TO 2001:
SIMULATION NO. 21

YEAR	GRADUATES REQUIRED AS NEW TEACHERS				ADMISSIONS (PRE-SERVICE)/ GRADUATE HIRED				A D M I S S I O N S				TOTAL OPERATING COSTS				C O S T									
	ELEMENTARY		SECONDARY		ELEMENTARY		SECONDARY		PRE-SERVICE		INSERVICE		TOTAL		ELEMENTARY		SECONDARY		COMBINED		ELEMENTARY		SECONDARY		COMBINED	
	NO.	NO.	RATIO	RATIO	NO.	NO.	RATIO	RATIO	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	
1977	1,300	1,350	2,650	2.14	2.16	2.15	2.15	2,782	500	3,282	2,916	523	3,439	5,698	1,023	6,721	15,600,000	16,800,000	32,400,000	4,753	4,885	4,821	\$	\$	\$	\$
1978	1,278	1,075	2,353	1.84	1.86	1.85	1.85	2,356	537	2,893	1,996	561	2,557	4,352	1,098	5,450	15,132,000	16,296,000	31,428,000	5,231	6,373	5,767	11,105	16,718	13,402	12,041
1979	1,148	792	1,940	1.55	1.55	1.55	1.55	1,776	574	2,350	1,231	599	1,830	3,006	1,173	4,179	14,678,040	15,807,120	30,485,160	6,247	8,640	7,295	9,730	26,721	14,294	
1980	1,186	420	1,606	1.25	1.25	1.25	1.25	1,483	611	2,094	525	637	1,162	2,008	1,248	3,256	14,237,699	15,332,906	29,570,605	6,800	13,197	9,083	9,587	23,479	13,608	
1981	1,097	320	1,416	1.25	1.25	1.25	1.25	1,371	648	2,019	399	675	1,074	1,770	1,323	3,093	13,810,568	14,872,919	28,683,487	6,841	13,843	9,273	7,716	42,772	12,326	
1982	1,264	140	1,404	1.25	1.25	1.25	1.25	1,580	685	2,265	175	713	888	1,755	1,398	3,153	13,396,251	14,426,732	27,822,983	5,915	16,251	8,825	7,458	11,897	9,114	
1983	1,292	70	1,362	1.25	1.25	1.25	1.25	1,615	722	2,337	88	751	839	1,702	1,473	3,175	12,994,363	13,933,930	26,988,293	5,560	16,689	8,499	9,518	17,359	13,650	
1984	1,010	91	1,101	1.25	1.25	1.25	1.25	1,263	759	2,022	113	789	902	1,376	1,548	2,924	12,604,532	13,574,112	26,178,644	6,234	15,044	8,953	8,161	5,432	9,654	
1985	987	331	1,381	1.25	1.25	1.25	1.25	1,234	796	2,030	414	827	1,241	1,648	1,623	3,271	12,226,396	13,166,888	25,393,285	6,024	10,611	7,764	6,581	13,197	8,764	
1986	1,147	342	1,489	1.25	1.25	1.25	1.25	1,434	833	2,267	427	865	1,292	1,861	1,698	3,559	11,859,604	12,771,882	24,631,486	5,231	9,883	6,920	6,269	10,493	8,060	
1987	1,206	408	1,614	1.25	1.25	1.25	1.25	1,507	833	2,340	510	865	1,735	2,017	1,698	3,715	11,622,412	12,516,444	24,138,856	4,967	9,103	6,498	5,592	13,043	7,734	
1988	1,339	356	1,694	1.25	1.25	1.25	1.25	1,673	833	2,506	445	865	1,310	2,118	1,698	3,816	11,506,188	12,391,280	23,897,468	4,591	9,460	6,262	5,678	14,716	8,093	
1989	1,353	286	1,639	1.25	1.25	1.25	1.25	1,691	833	2,524	357	865	1,222	2,049	1,698	3,747	11,506,188	12,391,280	23,897,468	4,558	10,136	6,378	5,164	18,337	7,730	
1990	1,493	198	1,690	1.25	1.25	1.25	1.25	1,866	833	2,699	247	865	1,112	2,113	1,698	3,811	11,552,213	12,440,845	23,993,058	4,280	11,188	6,296	5,380	7,995	7,268	
1991	1,485	346	1,830	1.25	1.25	1.25	1.25	1,856	833	2,689	432	865	1,297	2,288	1,698	3,986	11,609,974	12,503,049	24,113,023	4,318	9,640	6,050	5,083	9,723	6,903	
1992	1,577	428	2,005	1.25	1.25	1.25	1.25	1,971	833	2,804	535	865	1,400	2,506	1,698	4,204	11,679,634	12,578,067	24,257,701	4,166	8,982	5,770	5,066	9,280	6,761	
1993	1,620	518	2,139	1.25	1.25	1.25	1.25	2,026	833	2,859	648	865	1,513	2,673	1,698	4,371	11,761,391	12,666,114	24,427,504	4,114	8,373	5,588	4,949	9,821	6,680	
1994	1,684	552	2,236	1.25	1.25	1.25	1.25	2,105	833	2,938	690	865	1,555	2,795	1,698	4,493	11,855,482	12,767,443	24,622,924	4,035	8,209	5,480	4,986	7,571	6,247	
1995	1,704	748	2,452	1.25	1.25	1.25	1.25	2,130	833	2,963	936	865	1,801	3,065	1,698	4,763	11,962,181	12,882,350	24,844,531	4,038	7,154	5,216	5,187	8,058	6,425	
1996	1,658	831	2,488	1.25	1.25	1.25	1.25	2,072	833	2,905	1,038	865	1,903	3,111	1,698	4,809	12,081,803	13,011,173	25,092,977	4,159	6,836	5,218	4,972	8,831	6,398	
1997	1,733	804	2,537	1.25	1.25	1.25	1.25	2,167	833	3,000	1,075	865	2,000	3,171	1,698	4,869	12,202,621	13,141,285	25,343,906	4,068	7,028	5,205	5,003	7,781	6,184	
1998	1,762	908	2,669	1.25	1.25	1.25	1.25	2,202	833	3,035	1,135	865	2,000	3,337	1,698	5,035	12,324,648	13,272,698	25,597,345	4,061	6,638	5,084	4,920	7,509	6,015	
1999	1,818	1,003	2,821	1.25	1.25	1.25	1.25	2,272	833	3,105	1,254	865	2,119	3,526	1,698	5,224	12,447,894	13,405,425	25,853,319	4,009	6,327	4,949	4,754	7,112	5,757	
2000	1,916	1,115	3,031	1.25	1.25	1.25	1.25	2,395	833	3,228	1,394	865	2,259	3,789	1,698	5,467	12,572,373	13,539,479	26,111,852	3,895	5,993	4,759	4,581	6,966	5,572	
2001	2,036	1,199	3,236	1.25	1.25	1.25	1.25	2,546	833	3,379	1,499	865	2,364	4,045	1,698	5,743	12,698,097	13,674,874	26,372,971	3,758	5,784	4,592	---	---	---	

SOURCE: THE HANSEN GROUP
DETAILED REPORTS OF SIMULATION EXPERIMENTS 1-19
THE FUTURE FOR TEACHER EDUCATION IN ONTARIO

Chapter 6

Implications of Declining School Enrolments for the Education of Supervisory and Other School Officers

I have included in this section all officers of the board, by whatever title they may be called: e.g., director, associate or assistant director, superintendent, assistant superintendent, coordinators, consultants, principals, vice-principals and department heads. One of the most significant common characteristics is that they all hold teaching certificates and have, therefore, undertaken basic teacher education training. In nearly all cases they will have served as classroom teachers, often for many years and almost invariably with distinction. They will have been specially selected for their new positions in the hierarchical structure of a board's administration, and the paths they will have followed constitute the upwards mobility pattern traditionally found in school systems.

With the whole teaching force to draw upon for applicants the supply of potential supervisory officers is automatically guaranteed and there is no implication from declining enrolments that the supply will be greatly affected, except in terms of characteristics such as age and experience as the whole teaching force ages over the years. The demand is another matter. With enrolments in a steady state or in decline, there will be little or no demand for additional supervisory staff, only for replacements. Non-replacement, of course, is the favourite and least painful means of reducing staff, which will be necessary if financial constraints force the hand of a board or, more frequently, shrinkage in other parts of the education system makes it imperative to reduce staff in this category also. We were informed by boards and their senior officials at the public hearings that, in fact, the shrinkage of staff at this level was, as far as possible, proportional to the declines in enrolment. Some exceptions were found, naturally, because under unusual circumstances the administrative burdens are definitely not reduced proportionately, and certainly not necessarily immediately, when enrolment declines occur. The actual numbers of such staff in the

province since 1972, as given in official reports, is shown in Table 6.1, and it is clear that there have been fluctuations over the years.

One of the most serious implications of steady-state or declining enrolment is obviously that very few positions at the supervisory level become vacant, especially under present circumstances when practically all the administrative and supervisory officers are relatively young men and women. There won't be openings to any extent unless special efforts are made to introduce vertical mobility through term appointments. Unless mobility is instituted, including the lateral kind created by transfers or exchanges across systems or boards for short or long periods, why provide education programs for these officers other than refresher or updating courses? Seven courses were offered for principals-to-be by the Ministry of Education this past summer, with 100 or more "aspiring principals" in each. But schools are being twinned and closed, not new ones built, so the chances of getting a principalship are slim indeed. I visited nearly all of these courses in Southern Ontario this summer and although I was impressed with the calibre of candidates attending, I was concerned about the value of the course at this time.

No matter what is done about mobility, neither declining enrolment nor any other factor would lead one to suggest these officers should not be teachers first, with a considerable number of years' experience to their credit, before being considered for promotion. If training is to be provided, therefore, it simply must be of the in-service type, of which these courses for principals are very effective examples. Of course, the consultants and coordinators, depending upon their specialty, would be provided with a different form of in-service training, probably at one of the faculties of education or at the Ontario Institute for Studies in Education. It should be noted here that there is considerable merit to the plea for greater emphasis on internship (a form of learning on the job, preferably combined with a program of formal instruction, e.g., in curriculum or in teaching techniques). Again, however, I raise the question of why we should provide such programs when the numbers of openings are going to decline because of financial cutbacks as well as declining enrolments, and those in the positions are going to be there

TABLE 6.1
TEACHING STAFF AND DEPT. HEADS, SEPTEMBER 1977

ACADEMIC YEAR	SEX	ELEMENTARY SCHOOLS										SECONDARY SCHOOLS										ALL SCHOOLS																					
		PRINCIPAL		TOTAL		NOT REPORTED		CHAIRMAN DEPT. HEAD ASST. CO-ORDINATOR		REGULAR CLASSROOM TEACHER		ALL OTHERS		NOT REPORTED		PRINCIPAL		VICE-PRINCIPAL		CHAIRMAN DEPT. HEAD ASST. CO-ORDINATOR		REGULAR CLASSROOM TEACHER		ALL OTHERS		NOT REPORTED		PRINCIPAL		VICE-PRINCIPAL		CHAIRMAN DEPT. HEAD ASST. CO-ORDINATOR		REGULAR CLASSROOM TEACHER		ALL OTHERS		NOT REPORTED		TOTAL			
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%		
1972-73	MALE	3,262	18.64	1,334	7.62	681	3.89	11,251	65.79	710	4.05	---	---	17,502	100.0	560	2.37	736	3.12	7,063	29.93	1,111	62.36	522	2.21	---	---	23,396	100.0	3,622	4.30	2,070	5.04	7,744	18.84	26,233	13.82	1,732	5.00	---	---	41,988	100.0
	FEMALE	628	1.53	225	0.55	439	1.07	37,249	90.58	2,384	6.28	---	---	42,125	100.0	15	0.14	38	0.35	1,823	16.92	8,489	78.83	408	3.79	---	---	10,773	100.0	644	1.24	263	0.51	2,262	4.38	46,738	88.13	2,992	5.77	---	---	51,698	100.0
	TOTAL	3,890	6.64	1,559	2.66	1,120	1.91	48,794	83.12	3,394	5.62	---	---	58,627	100.0	575	1.47	774	2.25	8,886	26.85	23,204	67.51	939	2.71	---	---	34,369	100.0	4,444	4.80	2,533	2.51	11,006	10.76	71,968	77.39	4,224	4.54	---	---	92,996	100.0
1973-74	MALE	3,229	17.63	1,301	7.11	659	3.60	12,422	67.84	584	3.19	116	0.63	18,311	100.0	545	2.38	774	3.60	6,685	29.15	14,347	42.56	531	2.32	105	0.45	22,935	100.0	3,774	9.15	2,025	4.91	7,344	7.81	26,769	64.90	1,115	2.70	219	0.53	41,246	100.0
	FEMALE	586	1.43	201	0.49	404	0.98	37,167	89.80	2,351	5.68	681	1.65	41,390	100.0	11	0.11	21	0.21	1,593	16.11	7,777	78.63	398	4.02	81	0.82	9,291	100.0	597	1.17	232	0.45	1,997	5.89	46,944	87.64	2,743	5.36	762	1.49	51,281	100.0
	TOTAL	3,815	6.39	1,502	2.52	1,063	1.78	49,589	83.06	2,935	4.92	797	1.53	59,701	100.0	556	1.69	795	2.40	8,278	25.22	22,124	67.40	929	4.83	184	0.56	37,626	100.0	4,371	4.72	2,247	2.44	9,341	10.10	71,213	77.31	3,864	4.18	981	1.06	92,527	100.0
1974-75	MALE	3,288	17.56	1,292	6.90	744	3.97	12,710	67.80	690	3.68	1	0.01	18,725	100.0	551	2.36	720	3.08	6,699	28.45	14,900	63.72	510	2.18	5	0.02	23,385	100.0	3,899	9.12	2,012	4.78	7,443	17.68	27,610	65.57	1,200	2.85	6	0.01	42,110	100.0
	FEMALE	545	1.33	215	0.52	405	0.99	37,046	90.43	2,734	6.67	23	0.06	40,868	100.0	9	0.09	33	0.33	1,598	15.99	7,495	79.01	451	4.51	6	0.06	9,932	100.0	554	1.04	248	0.49	2,003	3.93	44,941	88.19	3,185	6.25	23	0.06	50,560	100.0
	TOTAL	3,833	6.42	1,507	2.52	1,149	1.92	49,756	83.35	3,424	5.74	24	0.04	59,693	100.0	560	1.68	753	2.26	8,297	24.86	22,395	62.50	961	2.88	11	0.03	33,327	100.0	4,393	4.72	2,260	2.43	9,446	10.15	72,551	77.97	4,389	4.71	35	0.03	93,070	100.0
1975-76	MALE	3,314	16.77	1,308	6.62	695	3.52	13,339	68.00	1,007	5.10	---	---	19,763	100.0	559	2.27	723	2.93	6,542	22.09	16,454	69.03	1,118	4.62	---	---	24,187	100.0	3,864	8.79	2,031	4.62	6,037	13.74	29,893	68.02	2,115	4.84	---	---	43,950	100.0
	FEMALE	539	1.30	239	0.56	345	0.83	36,302	87.42	4,093	9.88	---	---	41,409	100.0	12	0.11	40	0.39	1,212	11.86	8,515	83.82	440	4.31	---	---	10,219	100.0	551	1.07	270	0.52	1,557	3.02	44,717	86.61	4,533	8.78	---	---	51,628	100.0
	TOTAL	3,853	6.30	1,538	2.51	1,040	1.70	49,641	81.15	5,100	8.34	---	---	61,172	100.0	562	1.43	763	2.22	7,754	14	24,969	72.57	1,558	4.54	---	---	34,406	100.0	4,415	4.62	2,301	2.41	7,594	7.95	74,610	78.06	5,654	5.97	---	---	95,578	100.0
1976-77	MALE	3,341	16.55	1,293	6.41	720	3.57	13,744	68.10	1,085	5.38	---	---	20,183	100.0	552	2.26	743	3.05	6,557	21.94	16,618	69.13	1,122	4.61	---	---	24,392	100.0	3,893	8.73	2,036	4.57	6,077	13.63	30,362	68.11	2,207	4.95	---	---	44,575	100.0
	FEMALE	501	1.22	246	0.65	367	0.90	35,099	87.11	4,148	10.12	---	---	40,981	100.0	12	0.11	45	0.43	1,261	12.74	8,716	83.27	439	4.19	---	---	10,473	100.0	514	1.00	311	0.60	1,678	3.16	48,415	86.52	4,582	8.91	---	---	51,454	100.0
	TOTAL	3,842	6.28	1,539	2.55	1,087	1.78	49,443	80.83	5,233	8.56	---	---	61,164	100.0	564	1.42	788	2.28	7,818	18.08	25,334	72.66	1,561	4.48	---	---	34,865	100.0	4,406	4.54	2,347	2.44	7,705	8.02	74,777	77.87	6,794	7.07	---	---	96,029	100.0
1977-78	MALE	3,329	16.43	1,276	6.30	660	3.26	13,840	68.31	1,155	5.70	---	---	20,260	100.0	534	2.17	747	3.03	6,535	22.43	16,813	66.14	1,343	4.23	---	---	24,674	100.0	3,861	8.10	2,023	4.50	6,195	13.79	30,553	66.27	2,136	4.89	---	---	44,534	100.0
	FEMALE	494	1.24	272	0.68	299	0.75	34,568	86.64	4,257	10.69	---	---	39,810	100.0	15	0.14	43	0.46	1,327	12.52	8,737	82.46	468	4.42	---	---	10,596	100.0	504	1.01	321	0.64	1,626	3.42	45,444	86.74	4,754	9.47	---	---	50,426	100.0
	TOTAL	3,823	6.36	1,548	2.58	959	1.60	48,348	80.46	5,412	9.01	---	---	60,090	100.0	551	1.54	796	2.25	7,862	19.46	25,550	72.44	1,811	4.76	---	---	35,270	100.0	4,374	4.59	2,344	2.46	7,821	8.20	73,593	77.43	6,507	7.16	---	---	95,360	100.0

Source: Elementary Teacher Information Files, Ministry of Education.

for many years. As I have said so many times in my addresses, mobility in the school system has practically vanished and the structure has frozen solid because of concern over job security.

I do not mean to imply that workshops, conferences, seminars and the programs given by OCLEA (the Ontario Council for Leadership in Educational Administration), for example, should be discontinued forthwith. On the contrary, those in supervisory positions badly need this form of in-service training to help keep up their interest and morale as the system winds down, if for no other reasons. Even the very senior administrators -- the directors of education and assistant directors -- are quite young, many of them having been appointed since 1969. There is not much promise of natural attrition under these circumstances, unless perchance the strains of coping with decline age them prematurely.¹

Accordingly, I recommend:

Unless automatic vertical mobility is introduced into the system and enforced, all programs aimed at producing more trained supervisory officers be severely curtailed for the next five years.

On the other hand, I recommend:

Programs of in-service training for the incumbents be continued and their continuing professional education be encouraged through study leaves and the raising of expected levels of qualifications to include graduate courses at the master's and doctorate levels, as well as through workshops, conferences, other short courses and exchange arrangements. This would not mean any marked departure from existing practices, except possibly for a greater emphasis on graduate studies in education.

Finally, I recommend:

In all programs of in-service education particular attention be paid to the new problems of management in a steady-state or shrinking school system. Under these conditions new situations arise for which the traditional solutions may not be appropriate. Included in these

¹As I write these lines, I have become aware of the very large numbers of directors who have either resigned or taken another position. The stresses associated with management of decline may be greater than I had thought.

programs should be a focus on the new form of management, through consultation and consensus, which must follow as we move from the bureaucratic to the political model of school administration.

I recognize full well that many of our supervisory officers will lose their positions during the next decade and will require retraining or updating courses as they move down the ladder to junior positions, many back in the classrooms. If the cycle of vertical and lateral mobility for which I will be pressing in Chapter 8 is introduced, an extensive program of in-service education of "would-be" as well as "have-been" supervisory officers will also be required. This will cost money, but in my view it will be money very well spent. I do not think there need be extra cost if the efforts now being expended are simply channelled into these new and more productive directions and towards serving these new and much needed purposes. Returns to the school system through the introduction of flexibility of movement, which would open otherwise lost opportunities for advancement and restore morale and dedication as well as produce new ideas and initiatives, would more than repay in improved quality of education the paltry few dollars extra, if any, which might be required. I am proposing, in effect, a change in direction of present efforts, not the addition of an extra burden.

Chapter 7

Implications of Declining School Enrolment for the Administration of the School System

The Ministry of Education

Direct effects of declining enrolment on the organization of the Ministry of Education are rather few in number. However, the indirect psychological effect of dealing always with a shrinking system and knowing that decline -- or at best a steady-state system -- will be the pattern for many years, will almost certainly have deleterious effects on attitudes and morale of staff, due to the almost complete lack of promotion possibilities. Special efforts, similar to those recommended for school boards, will have to be made by the Minister to combat the negative effects of such a spirit.

The biggest problem for the Ministry, in both the central office and perhaps to a greater extent in the regional offices, will arise from financial constraints. The Ministry, after all, is totally dependent on the Provincial Treasurer for revenue; it cannot levy local taxes to recover losses sustained in the budget cuts imposed year after year.

But there is no cause for consideration of restructuring, either centrally or in the regional offices. There will, however, be a need for added emphasis on the planning and provision of greater assistance to those boards which need help in development of plans (demographic, building and finance) and in implementation of the curriculum guidelines and preparation of curriculum materials. This can be accomplished, in my opinion, through a reassignment of duties and shifts of existing personnel. The "monitoring" process upon which the Ministry seems already to have embarked should receive greater emphasis, from the point of view in particular of coordination of efforts of the various bodies and agencies and development of a spirit of cooperation in undertaking the tasks of common interest. In its initial phases, this need not cost

more money, unless imposed on a "crash" or "emergency" basis, and in the long run will save money through elimination of duplication of effort by the Ministry and the boards.¹ The regional offices will prove invaluable, in fact essential, in this thrust. My impression of their work is that it is excellent, of great assistance to the school boards (and consequently to the Minister), and that they would welcome the opportunity to extend the services of this kind which they have already begun to provide. Therefore I recommend:

The regional offices be strengthened to the fullest extent possible within the existing financial guidelines to help school boards develop demographic, building and finance plans, implement curriculum guidelines and prepare curriculum materials.

In my Second Interim Report I made it clear that, in my opinion, the Minister of Education should retain and where necessary regain greater control over certain matters of general public concern. My feelings that this was an essential move have been strengthened during recent months, and I hope she will accept my recommendations to exercise more control on matters such as current and capital expenditure plans, curriculum and curriculum materials and the conditions of employment of teachers and other staff by school boards.² To do so need not involve the employment of more staff, but rather a reassignment or clearer definition of the responsibilities of existing staff.

Frankly, from the representations made to me in written briefs and in discussions and correspondence, I am convinced that most school boards and their officials would welcome the assumption of a more active role by the Ministry. Possibly their taste of nearly unrestricted

¹A prime example comes to mind of the regional director who carefully assigned segments of curriculum development to different boards and then collected the findings and materials and shared them among all the boards.

²Prudence and common sense alone, for example, would dictate that she exercise some control over the salaries of board employees. At present the general legislative grants are controlled through limits, but on the other hand government is required by law to pay, on behalf of teachers, a 6% pension contribution and guarantee the pension fund, for salaries locally determined and over which it can exercise no control.

freedom has turned sour under the pressures of declining enrolment problems, but I think it goes beyond that to a full recognition of the Ministry as the senior partner in the enterprise, with broader resources and a wider view. There is, it seems, a genuine feeling that the senior partner does have rights and responsibilities which the public expects it to exercise and discharge effectively. There seems little doubt that the general public would be genuinely relieved by this change in role and would feel that its interests would thereby be more fully considered and protected.

Accordingly, I repeat below, unchanged, the recommendations I made in my Second Interim Report in regard to the activities of the Ministry:

- (1) Initiate immediately a sustained effort to promote decentralized political solutions to emerging local and provincial problems associated with declining enrolments, in particular, problems of coordination and cooperation. Begin the organization of many sessions for discussions, negotiation and trade-offs to deal with specific inter-board and inter-interest group issues. Encourage board level administrators and Ministry of Education officials to take the initiative in promoting these activities.
- (2) Take steps to increase the Ministry's control over certain finance-related decisions, including the use and sale of school buildings and sites and the working conditions and benefits of school staff members, such as pensions, termination gratuities and like arrangements.
- (3) Do what is in the Ministry's power to facilitate the emergence of a strong province-wide trustees organization that can speak with one voice and play an important political role.

Recent rapid changes in the regional offices, especially changes in their functions, have weakened them and made it difficult for their loyal and efficient staff to discharge all their responsibilities effectively, especially on the overload basis some seem to have adopted as the norm. Yet in these critical times we need those regional officers more than ever before. The Minister of Education faces a most difficult decision -- whether to decentralize many operations to the

regional offices or to centralize all of them in the Mowat Block. Frankly, I prefer a decentralized system and always have, and accordingly I recommend:

The operations of the regional offices be extended to provide greater assistance to the local school boards, if necessary through staff transfers from the central Toronto office.

I recommend further:

The Minister review the objectives and operations, including in particular the staffing complement, of the central office and of the regional offices to determine the extent to which decentralization in appropriate areas is functional.

The School Boards

A. Composition, Powers and Duties

Declining enrolments have very few implications for the structure of school boards we have developed in this province, save perhaps for the odd "isolate board" in northern Ontario which may disappear, or simply discontinue operations but continue "on paper".

The move in 1969 to county and district boards, and the equivalent for separate schools, went far towards equalizing educational opportunity and tax resources. The change also permitted a very marked improvement in the quality of education. But although it was recognized that many of the problems in education which plagued us over the years could be solved far more easily under this new system, no one at that time, to my knowledge, had considered the possibility of a period of rapidly declining enrolments with new problems and difficulties. Yet these larger units have also given most boards the resources and flexibility, not to mention the variety of conditions, which make it possible to cope more easily with the conditions arising from declining enrolments. Many areas have, in total, a stable enrolment base which promises to change very little during the rest of this century, whereas others are able to balance with ease losses in one part of their area with gains in another (e.g., Peel, south vs. north; Simcoe, south vs.

north; Scarborough, south and west vs. north and east). Not that the problems are avoided entirely, of course, and new ones pertaining to busing of younger children in particular do arise, but overall any board of this stable-state category will find itself in a fairly comfortable and fully viable position. Such does not hold true for boards in most of our large cities where declines in enrolment combined with increases in the migrant populations give rise to many new and complex problems, aggravated by declining enrolments in the older sections of the cities and adjoining suburbs to the point where "neighbourhood" schools have to be closed.

Members of the public unaware of the legal and constitutional rights of the Roman Catholic Separate School supporters, and of their clearly expressed legitimate desire to provide a full Catholic education for every Catholic child, may question the existence of our two systems -- public and separate schools. This questioning is not a new phenomenon, but it is given added force by the pressures of declining enrolments in the publicly-supported school system, especially when these are accentuated by the voluntary transfer of a relatively large number of Catholic children to the separate school system, i.e., their parents become separate school supporters. Only in rare instances were the questions based on intolerance and bigotry characteristic of earlier days. I am heartened by the decrease in animosity and bitterness between the two systems compared to what I found only 30 years ago during my service with the Hope Commission's examination of education in Ontario.

Strong efforts are sometimes made to force the sharing with the public school board of a single school building and site, or the rental of space in public school facilities by separate school boards. The advocates of such measures tend to overlook the difficulty -- and under some conditions, the impossibility -- of maintaining the essence of a Catholic school which is deemed so essential if religion and education are viewed as inseparable. Despite the problems with space that have arisen, particularly in the more sparsely populated areas and recently even in large urban centres such as Ottawa and Toronto, we must abide by the conditions of our 135-year-old dual system and learn to live with and even gain in the balance of advantages and disadvantages.

There is another reason I am not suggesting changes. The separate schools are not generally suffering from declining enrolments, and on a province-wide basis are unlikely to experience marked declines until towards the end of the century, depending in part upon the religion of immigrants from other lands. It is true that some separate school boards are suffering severely because of population shifts (as in Ottawa and Windsor) or sparsity of the Catholic population in some rural areas and in northern Ontario. But even in those cases there are no implications from either steady-state or declining enrolment which would lead to changes in the structure of the separate school system. There is an item of unfinished business with the government in regard to Catholic secondary schools, i.e., grades 11, 12, and 13, but this matter is beyond my terms of reference since it is not related in any way to declining enrolments. My only comment is to note that the government has recently reiterated its traditional policy on this point.

In the case of the Franco-Ontarian students, the introduction of French language secondary schools has given rise to something of an anomaly in structure. For the most part Franco-Ontarian children attend Roman Catholic Separate Schools for elementary education, JK to grade 8, then switch almost wholly to publicly-supported French language secondary schools which extend from grades 9 to 13.

The recent establishment of these French language secondary schools has meant a very rapid increase in enrolment in them, starting from the zero of a few years ago. That gives, or could give, the false impression of a rapid increase in the number of Franco-Ontarian children. As made clear in my First Interim Report, the historic trend and the projections show substantial losses of students in elementary and secondary schools attended by French-speaking children. In tables, charts and in the discussion in the text accompanying these, we made it clear that the fertility rate for our Franco-Ontarian citizens seems lower than the average for the province and apparently has been for some few years. Their fertility rates seem to parallel very closely those of the French-speaking population of Quebec, which are now the lowest in Canada.

There is no clear evidence of an increase in the number of live births in Quebec in recent years (i.e., up to the end of the first quarter of 1978), and their net interprovincial migration of children as well as their net total migration have been a fairly high negative amount for some time.

If our Franco-Ontarian citizens follow the patterns of the Quebecois we must anticipate a steady continued decline in enrolments to 1986, and probably for the rest of this century, in French language secondary schools as well as in French language elementary schools. Being a minority group of the school population to begin with, this poses a problem: in 1977 the enrolment in all French language schools constituted only 5.3% of the total school enrolment of the province, although at the 1971 census the population of French ethnic origin constituted 9.6% of the total population of the province. The fear of the Franco-Ontarians that they are rapidly being assimilated into the English-speaking population is fully supported by official statistics such as those above and in the following footnote. However, if one compares the 1971 census results for the percentage of language most often spoken at home¹ with that of the percentage of school enrolment in 1977, it could be argued that a higher proportion than anticipated of the Franco-Ontarian children are attending French language schools.² If this be true, and I sincerely hope it is, perhaps the trend towards full assimilation has not only been halted but actually reversed in the case of the children. The present government policy towards the French language seems to be working successfully.

I commissioned a study (Working Paper #22) of the Franco-Ontarian situation by a special committee, under the joint chairmen Dr. Robert Dixon and Monsieur André Lecuyer, which made an excellent and exhaustive

¹Of those classified as French ethnic origin, only 67.5% were reported (under Official Language) as speaking "French only" or "Both English and French," and only 44.7% of them reported French as the "Language Most Often Spoken at Home".

²Less than half (44.7%) Franco-Ontarians speak French most often at home. If the French ethnic population of Ontario is 9.6 of total population, it might be expected that less than half of those would be attending French language schools. But enrolment at French language schools is 5.3% of the total school enrolment. The 5.3% is more than half the 9.6%.

assessment of the situation and, as I had encouraged them to do, presented a set of recommendations of their own. I most sincerely appreciate their efforts and commend their report to the earnest and sympathetic consideration of the Minister of Education and her Cabinet colleagues.

The implications of declining enrolment for Franco-Ontarians are discouraging, especially if viewed as a long-term trend. Even with the present numbers it is extremely difficult to provide adequate school facilities in the sparsely populated and isolated parts of Ontario (which, geographically, means most of it). The difficulties are highlighted in a study I received from the Nipissing District Roman Catholic Separate School Board¹, entitled New Dimensions, a report from the Committee on Assimilation which they set up in November, 1977, and which reported on April 27, 1978. (The project director was Madame Laura Gueguen-Charron, assisted by three women and two men). The members of the committee firmly believed that the measures they proposed for the schools "will halt the process of anglicization and will improve relations between the two linguistic groups by promoting mutual respect". They admit that the general program they recommend is an ambitious one and that they have placed the whole responsibility on the French-language schools. One of their major recommendations, in fact, calls for

"the formation of a French language, denominational school system from kindergarten to grade 13".

But they did not recommend a separate board for the French language schools. The committee also recognized the complex problems which arise when the school population comprises the "obviously Francophone," the "partially anglicized," and the "virtually anglicized". But they have not, in my opinion, nor has the Dixon-Lecuyer committee, understood fully and accepted the implications of the extent of the declines in enrolment faced by the French language schools, and for which I gave

¹I certainly appreciated and welcomed the receipt of the report of this study, but the readers must remember that I neither initiated the study nor supported it financially from funds of the Commission on Declining School Enrolments in Ontario. Frankly, I was very pleased to note that the board had itself perceived the need and went ahead with the survey.

projections in my First Interim Report. The work of my Commission was known to both groups, as was the extent of the probable decline in enrolment, and the Nipissing group quite clearly understood that the decline would accentuate their problems, as they expressed in the following paragraphs (p.30):

"This decrease could have a very harmful effect on the situation of the Franco-Ontarians who are already widely dispersed throughout this vast region (Nipissing). School boards may decide to close down French schools or integrate them within the English schools. Other problems might arise with respect to the elimination of programs and options as well as the reduction in the number of French education specialists. These measures must be prevented at all costs.

We have already pointed out the importance of homogeneous French schools and the harmful effects of mixed schools. The Franco-Ontarian identity of the existing schools must not be destroyed by a reshuffling which would encourage assimilation. The school is a cultural centre which must not be lost to the community.

The Ministry figures (of decline) show that if the present pupil-teacher ratio is maintained along with the current average rate of registration, approximately 50 elementary and 10 secondary schools are destined to disappear. It is obvious that a certain degree of reshuffling of Francophone pupils in large centres where Franco-Ontarians are in sufficient numbers could be accomplished without undue harm, but the same criteria must not be rigidly applied in areas of lower Francophone density."

The problems are well stated, and just as clearly stated in even more detail, in the Dixon-Lecuyer report. I am sympathetic towards the aspirations of the Franco-Ontarians and understand their fears of assimilation, but some situations are developing for which there can be no solution to meet their needs and desires. The combination of declining enrolment and sparsity of population can be a disastrous one for the French language schools. We must accept that this is so and live with the consequences. The facts indicate that the proposal to establish a separated French language school system, presumably dependent for local support solely upon the taxes of the Francophone supporters, would be an extremely unwise move since, except for the very few areas where the Francophone population is congregated in large numbers, the system would be, from its inception, a very weak one. It will be far wiser and more reasonable for the Francophones to build upon the strength

and support of the other separate school supporters in elementary education and upon all the taxpayers in the case of secondary schools. The fact is that the Francophones are too few in number and too weak in financial resources to "go it" on their own, which may be a bitter pill to swallow, but as I see it there is no viable alternative to the present organization of school boards and units of administration.

I was appalled, quite frankly, at some of the situations described to us in northern Ontario and in the isolated rural areas of southern Ontario. Pupils are divided between public and separate schools, between elementary and secondary schools, between English and French language schools. With French immersion classes demanding separated facilities, the English language schools are divided again. (Interestingly, I sensed no particular eagerness on the part of the Francophones to accept the French immersion classes of Anglophones into their schools or to admit large or even small numbers of Anglophones who desire to learn French by attending French language schools.) Dwindling financial resources combined with dwindling numbers of students spell coordination and consolidation of efforts to me, not further subdivisions into fragmented splinters which are not viable.

B. Administrative Staffing

Although declining enrolments may have few, if any, implications for the school board structures, there are definite implications for the administrative organization of each school board. As a result, I commissioned two studies on administrative organization under conditions of declining enrolment.¹ Most of the findings relate more to the education of administrative officers and to their employment and have been utilized in Chapters 6 and 8. Only the results relevant to administration organization will be discussed here. The scope in this part is broad enough to include directors, superintendents, other supervisory officers

¹(a) Scott, J. Glenn, Hickcox, Edward S., McLeod, Gerald T., and Ryan, Doris W: The Impact of Declining Enrolments on School Governance and Administration in Ontario, Working Paper #9, April, 1978.

(b) Brown, Alan F., O'Toole, Pádraig, and DeFour, Reginald: The Impact of Declining Enrolment Upon the Principal and Vice-Principal in Ontario with Implications and Alternatives, Working Paper #13, May, 1978.

and consultants and coordinators, i.e., the whole category above the classroom teacher, with the exception of department heads in secondary schools.

In my Second Interim Report I discussed at some length the proposals relating to the models of administrative structure commonly employed, i.e., the bureaucratic and hierarchical versus the "political," and recommended recognition of our move towards the latter form and further encouragement of this change. What this primarily involves, of course, is greater cooperation and coordination of efforts, not only between levels of staff within the system of a single board, but more especially cooperation between the Ministry of Education and the school boards, among school boards throughout the province, and more particularly between board officers and other staff in making mutually beneficial arrangements, long-term or short-term. At the public hearings and in meetings with other groups I sensed a feeling that in some of the arrangements insisted upon today by the Ministry there was the danger of far too much costly and wasteful duplication of effort and that most could be avoided if there were closer working relationships and coordination. There was also a strong feeling expressed by some boards (the smaller and weaker financially, generally) that they wanted and needed assistance from consultants and coordinators employed by the regional office, and that they should not be forced to appoint and pay for such officers themselves. What this means, of course, is an acceleration of the move towards the political model, of consultation and decision by consensus, and of cooperation and coordination encouraged and sponsored where need be by the Ministry of Education and its regional offices. Undoubtedly, one of the implications of declining enrolment is greater impetus in this direction.

Naturally, the new directions could have profound effects on the administrative organization of board officers and could mean the disappearance of some categories. At one extreme the organization could consist of the director of education alone (with assistance in business affairs, of course) and the principals of his schools who assume the duties formerly assigned to other supervisory officers, including the

functions of curriculum development. The main function of the principal, of course, is managerial, dealing chiefly with interpersonal relationships within his school. This will not change, no matter what the organization may become.

One obvious implication of declining enrolments is a reduction in the administrative staff, in the central office and even down to the level of principals and vice-principals. This seems to me a reasonable expectation and almost essential if the numbers of other staff (e.g., teachers) have been reduced substantially. This requires a careful assessment of needs and functions, not a haphazard "chopping" of staff; a position should be eliminated only if there exists a plan for the essential duties to be carried out by others. Accordingly, I recommend:

Each school board in the province be required by the Minister of Education to conduct a thorough "needs assessment" of the positions and functions of its administrative staff, from the position of vice-principal to that of director, and prepare a plan for the short-term and long-term future of the staffing of its schools and central office(s). The needs assessment and plan be reviewed and revised, as necessary, every three years and in each case a copy of the assessment and of the staffing plan be filed, for evaluation and approval, with the Ministry of Education through its regional office.

It seems feasible that many of the functions and duties of consultants and coordinators attached to the central offices of boards could be assumed by the experienced and professional teaching staffs of the schools and that school principals could assume more of a system-wide management role, replacing many of the supervisory officers attached to the central office. Declining enrolment carries with it the clear implication that we move in this direction as speedily as possible, not only to streamline operations and save money but to make greater use of the human resources available and provide greater challenges as well as opportunities to the staffs. Accordingly, I recommend:

In conducting its needs assessment and in preparing its staffing plan, the school board operate on the assumption that more of the responsibilities be delegated

to staff at the school level and that the Ministry of Education in its evaluation and approval of each plan bear this in mind.

I also recommend:

The Minister ensure that where emergency or crisis conditions of short duration arise, appointments of staff by boards to deal with them be on a short-term task-determined basis only.

C. The North

Northern Ontario has many special problems. I have been able to discuss relatively few of them. Declining enrolments have hit the school boards hard, in many cases turning a difficult task into an impossible one, even for the North where the "impossible" somehow seems to be commonplace. I am very concerned about the quality of education which can be provided in many of the far-flung outposts, even with the complementary services of ETV, radio and correspondence courses, and, of course, a greater use of computers in education. When the natural resources are mined out and an exodus of population (especially of young people) occurs, then the future is grim indeed for the education of the few children remaining there (and of the native Indian and Inuit children and adults as well). Money helps, but it is not the full answer. Even the greater use of boarding facilities in the larger centres presents hardships and hazards, and tearing families apart -- even with the best of intentions -- may in the long run do more harm than good. I have the uneasy feeling that this is another case where education must follow economic and social change. It may even be that we must accept the wholly unpalatable truth that for economic reasons, we simply cannot guarantee the desired high quality of education in those places.

D. Large and Small Boards

My original impression was that declining enrolments would have greater implications for small than for large boards. Our studies, which comprise a rather thorough investigation, indicate the contrary,

and I accept -- with some surprise -- that this is so. The impact has struck with almost stunning force on the large boards, those in the large urban centres and in many of the adjacent large (older) suburban areas. Financially, of course, they have always had the greatest resources. (Many really need no help from the province, and should, on an equalization formula basis, provide funds to be distributed to other less fortunate parts of the province.) They have also traditionally been wealthy in supplementary human resources -- supervisory officers, specialists, consultants, coordinators and so on. Now they face the prospect of a most unwelcome shrinkage in enrolment of 50% to more than 60%, with no relief in sight in this century or the next, unless the whole city is destroyed and rebuilt as a place in which young couples can live and raise a family.

It will be a painful process for the urban school authorities to wind down their huge systems of schools, teachers and administrators and preside over the partial liquidation of their education empires. But so it must be and the sooner they start the better for all of us. The hardest aspect for them to swallow will be the pill of "share the wealth". They have concentrations of wealth in the form of industrial and commercial assessment that will not disappear, but without the children to educate and the associated responsibilities, are they to be left to enjoy the wealth alone when their charges have become the responsibility of others? As I indicated in my Second Interim Report, I think otherwise; a radical change must be made in our system of education finance. I will return to this point in Chapter 10, on Implications for School Finance, and give my recommendations for reform there.

The cost of implementing the recommendations made in this chapter will be minimal at the local level and at the provincial level. Indeed, there should be substantial savings accruing from some of the administrative changes proposed. What I envisage, of course, are some savings through reordering of some functions and tasks and the consequent elimination of duplication.

Chapter 8

Implications of Declining School Enrolment for Staffing the Schools of the System

8.1 Regular Classroom Teachers, Other Teachers, and Size of Classes

In the section of this chapter on Administrative Staff (8.3, p. 231), I show the number of regular classroom teachers in comparison with the number of administrators, supervisors, etc. In each case a ratio can be calculated showing what amounts to a pupil-teacher ratio, since supervisors and administrators holding teaching certificates are normally classified as "teachers". I have been unable to locate in the Annual Reports of the Minister of Education (Education Statistics, Ontario) similar detailed figures. For example, the Report for 1976 contains the statistics shown in Table 8.1, where the teaching staff is classified by "position," but, unfortunately the footnote to Table 5.45, p. 78, of that Report warns that the data "are derived from a separate reporting system. The above data should be used only as an indication of the distribution of teaching staff by type of duty." Frankly, I am amazed at the lack of accurate data in regard to such an important matter, and I recommend:

The Minister of Education take steps at once to ensure that proper records of job classifications are made in the Ministry and maintained, and the results published annually.

I recommend further:

Pupil ratios be calculated and reported for each type of position, based on September 30 enrolment figures.

Since the figures in Table 8.1 agree very closely with those reported in the section on Administrative Staff, presumably one can place some faith in the results shown and conclusions drawn.

The reader should be aware, however, that there are differences in some figures, even when they come from the same source, because more than one data file is used for calculations. Computer totals may not

TABLE 8.1
TEACHING STAFF* BY POSITIONS, SEPTEMBER, 1976, AT SCHOOL LEVEL

TYPE OF POSITION		TYPE OF SCHOOL				TOTAL ALL SCHOOLS
		PUBLIC	ROMAN CATHOLIC SEPARATE	TOTAL ELEMENTARY	SECONDARY	
PRINCIPAL	No.	2,513	1,228	3,741	599	4,340
	Pupil Ratio	372.98	344.29	363.56	1023.46	454.64
VICE-PRINCIPAL	No.	1,171	317	1,488	821	2,309
	Pupil Ratio	800.42	1333.73	914.04	746.72	854.54
REGULAR TEACHERS	No.	33,315	14,259	47,574	26,035	73,609
	Pupil Ratio	28.13	29.65	28.59	23.55	26.81
CHAIRMAN/DEPARTMENT HEAD	No.	345	95	440	7,000	7,440
	Pupil Ratio	2716.79	4450.45	3091.10	87.58	265.21
OTHERS	No.	3,319	1,759	5,078	1,651	6,729
	Pupil Ratio	282.40	240.36	267.84	371.32	293.23
TOTAL	No.	40,663	17,658	58,321	36,106	94,427
	Pupil Ratio	23.05	23.94	23.32	16.98	20.90
ENROLMENT ON SEPTEMBER 30, 1976		937,292	422,793	1,360,085	613,055	1,973,140

* Includes full-time teaching staff and part-time teaching staff working 25 hours or more per week.

Source: Annual Report of the Minister of Education, Educational Statistics, Ontario, 1976.
Table 5.45, p. 78.

coincide because of discrepancies in original collected data. It should also be pointed out, especially in this chapter, that minor table errors originate at the source.

The data in Table 8.1 should cure everyone concerned with education of the bad habit, one of the most misleading I have ever encountered in statistics of this type, of calculating and using a single pupil-teacher ratio. To show how absurd the situation is, or could be made to be, I have calculated the pupil-ratio in Table 8.1 for each type of position separately (I didn't bother with a number of obvious combinations of positions). The figures generally quoted and used in negotiations between teachers and their employing board are those shown in the Total row, second to the bottom in the table. But the ordinary person, including most teachers, think we mean the pupil ratios up in the middle row for Regular Teachers, and the differences are very great indeed. I am confident, for example, that the ordinary citizen is firmly convinced that every secondary school teacher faces classes of size 16.98 (say 17) pupils all day every day, whereas the average for the regular teachers is 23.55. Those additional 6.6 pupils, on the average, make a very big difference to the teacher.

In terms of enrolments, it is only the public schools that have shown a steady decline since 1970, so we must look at their patterns of staffing to see what the effect of the reductions in enrolment might be. Accordingly, I show in Table 8.2 a set of statistics similar to those of Table 8.1, but for public schools only this time, not all schools, and from 1972-73 to 1977. Note, first, that during this period the enrolment in public schools has decreased from 1,022,935 to 907,777 pupils, a total loss of 15,158 pupils or 11.26% in five years (just over 2% per year, on the average). Unfortunately, to date I have been unable to find data for years earlier than 1972-73, but for these recent years the picture is clear enough:

- (a) the percentage of regular teachers on staff has decreased;
- (b) The pupil ratio for regular teachers has generally decreased over the period, but with two peculiar years;
- (c) the total staff PTR has decreased steadily throughout the period from 24.18 to 22.38.

TABLE 8.2
PUBLIC SCHOOL TEACHING STAFF BY POSITIONS, 1972-77
(analysis of changes in staffing patterns)

YEAR	SEPTEMBER ENROLMENT		TYPE OF POSITION					TOTAL ALL TEACHERS	PUPIL- REGULAR TEACHER RATIO	TOTAL PUPIL- TEACHER RATIO
			REGULAR TEACHERS	PRINCIPAL	VICE- PRINCIPAL	CHAIRMAN DEPT. HEAD ASSIST. DEPT. HEAD	OTHERS			
1972-73	1,022,935	NUMBER	35,350	2,643	1,212	715	2,379	42,299		
		PERCENT OF STAFF	83.57	6.25	2.87	1.69	5.62	100.00	28.94	24.18
1973-74	998,668	NUMBER	34,440	2,564	1,174	701	2,595	41,474		
		PERCENT OF STAFF	83.04	6.18	2.83	1.69	6.26	100.00	29.00	24.08
1974-75	977,545	NUMBER	34,514	2,569	1,157	759	2,333	41,332		
		PERCENT OF STAFF	83.50	6.22	2.80	1.84	5.64	100.00	28.32	23.65
1975 ⁽³⁾	961,625	NUMBER	33,603	2,534	1,164	327	3,295	40,923		
		PERCENT OF STAFF	82.12	6.19	2.84	0.80	8.05	100.00	28.62	23.50
1976	937,292	NUMBER	33,315	2,513	1,171	345	3,319	40,663		
		PERCENT OF STAFF	81.93	6.18	2.88	0.85	8.16	100.00	28.13	23.05
1977	907,777	NUMBER	32,768	2,501	1,173	559 ⁽¹⁾	3,558	40,559	⁽²⁾ 27.70	⁽²⁾ 22.38
		PERCENT OF STAFF	80.79	6.17	2.89	1.38	8.77	100.00		

(1) Reclassification in junior high schools in North York.

(2) The average class size in public schools for our sample on May 30, 1978, was 27.98.

(3) Change to calendar year.

Source: Annual Reports of the Minister of Education, Education Statistics.

Taken from special table of "teaching staff by position," and includes full-time

Consequently, the "work load" has presumably been lightened for all categories, especially for those classified as "others," not necessarily only for the classroom or "regular" teacher.

In fact, of course, these pupil-ratio averages, like all averages, can be misleading, which is why I was so pleased that the teacher associations cooperated with the Commission in the collection of information on the distribution of actual class sizes, similar to the data routinely collected and reported for England and Wales. The Nova Scotia Teachers' Union cooperated in collecting the data as a pilot project in that province and we now have the same information in Ontario for elementary schools (on a sample basis) and all secondary schools (using the OSSTF -- Ontario Secondary School Teachers' Federation -- computer data bank for the latter).

The first set of figures, in Table 8.3, are for England and Wales in January, 1976, showing the distribution of size of classes by type of school (maintained primary schools, maintained middle schools and maintained secondary schools). The average class size is given in the bottom row of the table: 29.2 for all primary, 27.9 for middle schools and 22.3 for secondary schools. I was amazed to find how many large classes there were and that the average for the primary classes was nearly 30 pupils. Even the middle schools have large classes, quite a few being 36 pupils or more. The class size is smaller for the secondary, and the distribution skewed quite markedly towards the small class end of the scale. I am not certain about the classes reported as 41 students and over, since they seem out of proportion and may be some form of "double classes" for special forms of instruction.

In Table 8.4 I have reported the basic information, or rather one part of it, secured in the Nova Scotia pilot study. While there are a number of relatively large classes, especially in the elementary school panel (primary to grade 6), they are less common than reported for England and Wales. Using only the columns headed Attending (meaning the number of pupils in the class on Count Day; we think that not all teachers understood what was meant by Registered), I calculated the median class sizes from Table 8.4A to be:

TABLE 8.3

DISTRIBUTION AND NUMBER OF CLASSES BY SIZE:
SUMMARY STATISTICS ON SIZE OF CLASSES,
ENGLAND AND WALES, JANUARY, 1976

SIZE OF CLASSES	NUMBER OF CLASSES					
	MAINTAINED PRIMARY SCHOOLS ⁽¹⁾				MAINTAINED MIDDLE SCHOOLS	MAINTAINED SECONDARY SCHOOLS
	NURSERY	SPECIAL	OTHER	ALL PRIMARY		
UP TO 5	498	928	4,033	5,459	222	7,945
6-10					592	12,421
11-15					834	21,753
16-20	595	153	9,423	10,171	1,497	28,837
21-25	722	8	23,750	24,480	2,315	27,265
26-30	1,084	6	50,696	51,786	4,646	39,380
31-35	181	2	54,450	54,633	4,224	20,809
36-40	160	1	19,348	19,509	1,068	1,667
41 & OVER	103	-	1,456	1,559	452	2,553
TOTAL NUMBER OF CLASSES	3,343	1,098	163,156	167,597	15,850	162,630
AVERAGE SIZE OF CLASS	24.7	11.0	29.4	29.2	27.9	22.3

(1) Part-time pupils under age 5 counted as 0.5
Total number of classes = 346,077
Average size of class = 25.9 students

Source: Statistics of England and Wales,
Education and Science Ministry.

TABLE 8.4

NOVA SCOTIA: CLASS SIZE STUDY, SEPTEMBER 30, 1977, COUNT DAY,
DISTRIBUTION OF CLASSES BY SIZE (1st, 2nd, 3rd, 4th and Last Periods of Day)

A: NUMBER OF CLASSES

SIZE OF CLASS	NUMBER OF CLASSES ON SEPTEMBER 30							
	ALL SCHOOLS		ELEMENTARY		JUNIOR HIGH		SENIOR HIGH	
	REGISTERED	ATTENDING	REGISTERED	ATTENDING	REGISTERED	ATTENDING	REGISTERED	ATTENDING
1-5	408	444	337	360	50	54	21	30
6-10	585	748	289	308	170	247	126	193
11-15	2,110	2,471	636	777	949	1,118	525	576
16-20	4,732	5,705	2,611	3,100	1,254	1,399	867	1,206
21-25	9,740	10,841	6,257	6,658	1,818	2,273	1,665	1,910
26-30	10,535	9,276	5,534	4,946	3,155	2,901	1,846	1,429
31-35	3,718	2,654	1,751	1,379	1,436	962	531	313
36-40	461	246	202	153	186	80	73	13
41 & OVER	179	164	141	127	22	15	16	22
TOTAL	32,468	32,549	17,758	17,808	9,040	9,049	5,670	5,692

B: PERCENTAGE OF CLASSES

SIZE OF CLASS	PERCENTAGE OF CLASSES ON SEPTEMBER 30							
	ALL SCHOOLS		ELEMENTARY		JUNIOR HIGH		SENIOR HIGH	
	REGISTERED	ATTENDING	REGISTERED	ATTENDING	REGISTERED	ATTENDING	REGISTERED	ATTENDING
1-5	1.26%	1.36%	1.90%	2.02%	0.55%	0.60%	0.37%	0.53%
6-10	1.77	2.30	1.63	1.73	1.88	2.73	2.22	3.39
11-15	6.50	7.59	3.58	4.36	10.50	12.35	9.26	10.12
16-20	14.58	17.53	14.70	17.41	13.87	15.46	15.29	21.19
21-25	30.01	33.31	35.23	37.39	20.11	25.12	29.37	33.59
26-30	32.46	28.50	31.16	27.77	34.90	32.06	32.56	25.11
31-35	11.45	8.15	9.86	7.74	15.88	10.63	9.37	5.50
36-40	1.42	0.76	1.14	0.86	2.06	0.88	1.29	0.23
41 & OVER	0.55	0.50	0.79	0.71	0.24	0.17	0.28	0.39
TOTAL	100	100	100	100	100	100	100	100

Source: Working Paper #19, R. Lewis,
The Commission on Declining School Enrolments in Ontario, 1978.

<u>Type of School</u>	<u>Median Class Size</u>
All Schools	24.2
Elementary	24.3
Junior High	24.8
Senior High	23.2

The averages, except for the senior high, are substantially below those reported for England and Wales.

For our own province we were able to secure immediately from the OSSTF master files data on secondary school class size as of September 30, 1977, and under contract with my Commission a complete set of tables and a report were prepared and will be issued separately. However, I have provided a summary in Table 8.5 for all secondary schools and separately for the large boards, medium boards, small boards and the Metro boards, since I felt that the differences among boards might be substantial. Chart 8.1 illustrates all the figures in Table 8.5, except those for all secondary schools. For all secondary school boards, the median was 25.13 students and the size of the average class varied from 26.05 students for the large boards to 24.05 students for the small boards. For the medium-sized boards it was 25.08 students and for the Metro Boards 24.78 students. These averages are larger than those reported for England and Wales and for Nova Scotia. A surprisingly large number of classes contained 31 or more students (18.9% or nearly one of every five). The situation revealed by this table is far removed from the general picture conveyed by the pupil-teacher ratio of 17 so frequently quoted for secondary schools. Nearly 85% of the classes have more than 17 students. The use of this general pupil-teacher ratio figure is misleading and should be discontinued.

Class Size in Elementary Schools

For the elementary schools, the results of the sample survey conducted on our behalf, through agreement with the Ontario Teachers' Federation, are given in Table 8.6. Observe, again, that there are many large classes and that the median class sizes in the bottom row differ greatly from the pupil-teacher ratio commonly used. For September, 1977, for example, the following figures were reported in the Minister's Report, from which I calculated the PTR:

TABLE 8.5

ONTARIO SECONDARY SCHOOLS, SEPTEMBER 30, 1977,
NUMERICAL AND PERCENTAGE DISTRIBUTION OF CLASSES BY CLASS SIZE AND BOARD SIZE

CLASS SIZE	LARGE BOARDS ¹ ENROLMENT 30,000 +		MEDIUM BOARDS ENROLMENT 10,000 TO 30,000		SMALL BOARDS ENROLMENT LESS THAN 10,000		METRO BOARDS ²		ALL BOARDS	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
1-5	182	0.4	274	0.6	93	0.7	433	0.8	982	0.6
6-10	863	2.1	1,354	2.9	512	3.8	1,493	2.7	4,222	2.7
11-15	2,954	7.2	4,078	8.8	1,475	10.8	4,602	8.3	13,109	8.4
16-20	7,011	17.0	8,365	17.9	2,695	19.7	10,931	19.7	29,002	18.5
21-25	9,488	23.0	11,313	24.3	3,367	24.7	13,595	24.5	37,763	24.1
26-30	11,921	28.9	12,484	26.8	3,291	24.1	14,487	26.1	42,183	26.9
31-35	7,547	18.3	7,475	16.0	1,847	13.5	8,611	15.5	25,480	16.2
36-40	1,160	2.8	1,184	2.5	333	2.4	1,207	2.2	3,884	2.5
41 & UP	96	0.2	90	0.2	39	0.3	125	0.2	350	0.2
TOTAL	41,222	100	46,617	100	13,652	100	55,484	100	156,975	100
MEDIAN SIZE	26.05	-	25.08	-	24.05	-	24.78	-	25.13	-

Note: 84.64% of classes are larger than the 17.0 PTR size usually considered actual.

¹Excluding Metropolitan Toronto and 4 large city boards.

²Metropolitan Toronto and 4 large city boards.

Source: Survey conducted by OSSTF.

CHART 8.1

PERCENT DISTRIBUTION OF ONTARIO SECONDARY SCHOOL CLASSES,
BY CLASS SIZE AND SIZE OF BOARD, SEPTEMBER 30, 1977

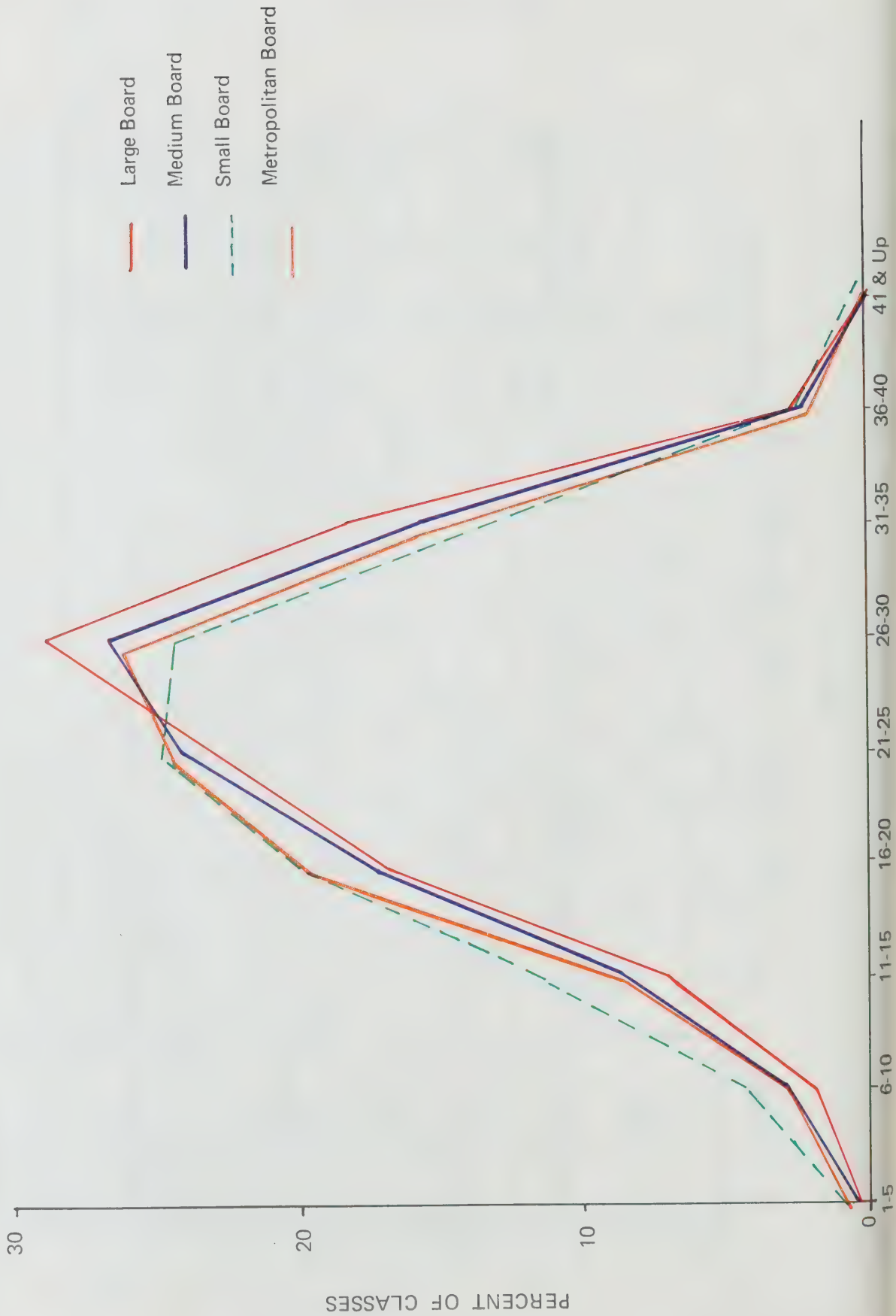


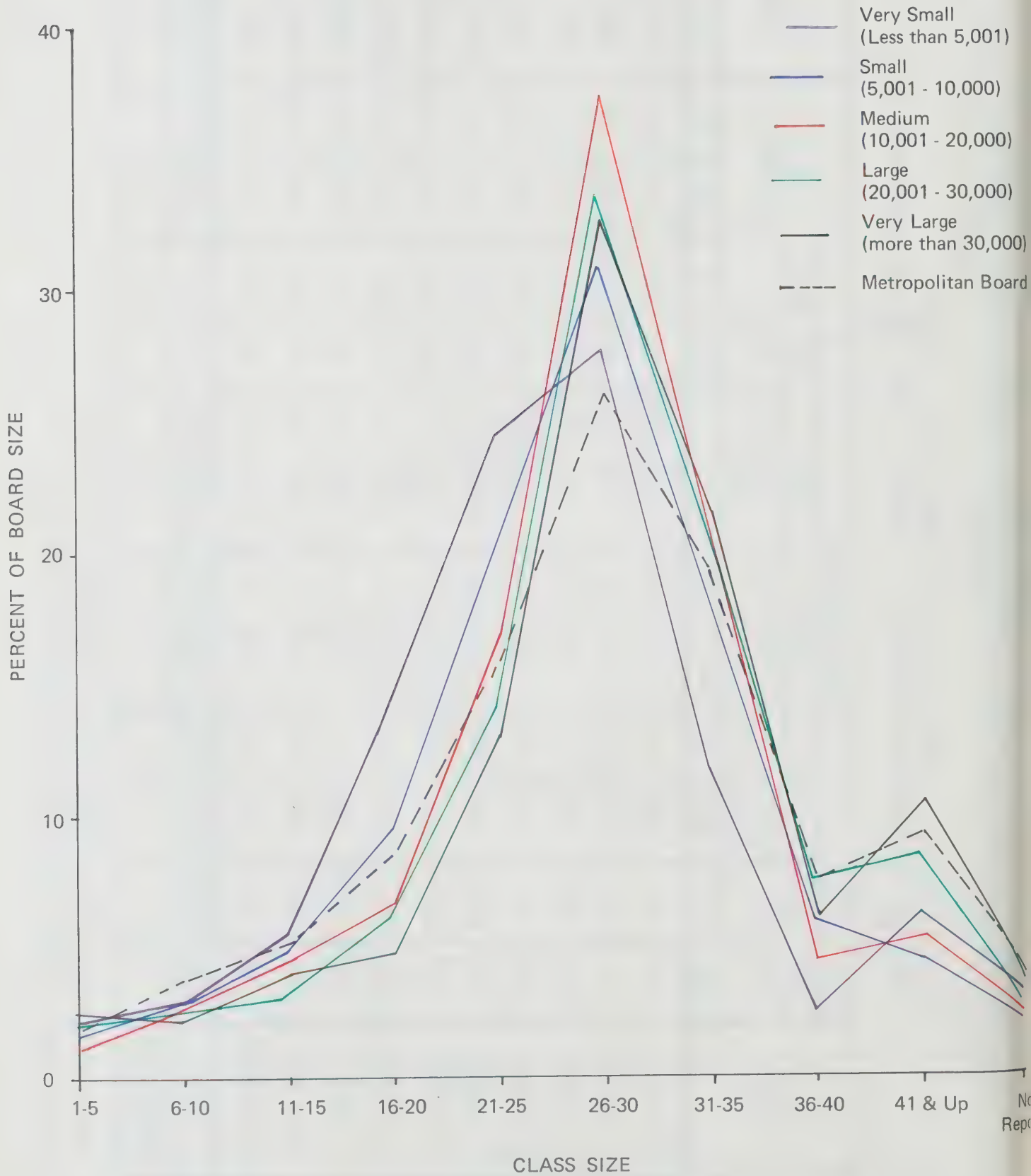
TABLE 8.6

ONTARIO ELEMENTARY SCHOOLS, MAY 30, 1978,
NUMERICAL AND PERCENTAGE DISTRIBUTION OF CLASSES BY CLASS SIZE AND SCHOOL BOARD SIZE

CLASS SIZE	SCHOOL BOARD SIZE												METRO BOARDS		ALL BOARDS ¹	
	VERY LARGE		LARGE		MEDIUM		SMALL		VERY SMALL							
	30,000 & MORE		20,001 TO 30,000		10,001 TO 20,000		5,001 TO 10,000		5,000 OR LESS							
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%		
1-5	17	2.4	20	2.0	13	1.0	21	1.7	18	2.1	32	1.8	121	1.8		
6-10	16	2.3	23	2.4	33	2.5	36	2.8	25	2.9	66	3.7	199	2.9		
11-15	27	3.9	30	3.1	54	4.2	60	4.9	46	5.4	92	5.1	309	4.5		
16-20	33	4.7	59	6.0	86	6.6	116	9.4	122	14.3	151	8.4	567	8.3		
21-25	89	12.7	136	13.9	216	16.6	251	20.4	207	24.3	283	15.7	1,182	17.3		
26-30	227	32.5	323	33.1	481	37.1	378	30.7	235	27.6	466	25.9	2,110	30.7		
31-35	150	21.5	203	20.8	263	20.3	219	17.8	100	11.7	344	19.1	1,279	18.6		
36-40	42	6.0	73	7.5	56	4.3	73	5.9	21	2.5	133	7.4	398	5.8		
41 & UP	73	10.4	82	8.4	68	5.2	54	4.4	52	6.1	166	9.2	495	7.2		
NOT REPORTED	25	3.6	27	2.8	29	2.2	25	2.0	26	3.1	68	3.7	200	2.9		
TOTAL	699	100.0	976	100.0	1,299	100.0	1,233	100.0	852	100.0	1,801	100.0	6,860	100.0		
MEDIAN SIZE ESTIMATED	28.91		28.70		27.92		27.09		25.38		28.10		27.76			

¹Excluding 25 cases not classified by school board size.
Source: Sample survey conducted by this Commission.

PERCENT DISTRIBUTION OF ONTARIO ELEMENTARY SCHOOL CLASSES,
BY CLASS SIZE AND SIZE OF BOARD, SEPTEMBER 30, 1977



Elementary Schools, 1977

	Public	Separate	Total
Number of Teachers (full-time only)	39,395	17,377	56,772
Enrolment	907,777	421,619	1,329,396
Pupil-Teacher Ratio	23.04	24.26	23.42

Source: Education Statistics, Ontario, 1977, Ministry of Education (Table 5.30, pp. 76-77)

In every table showing the distribution of elementary school class sizes¹, we note that the vast majority of classes are considerably larger than the value of the PTR (public schools, 23.04; Roman Catholic separate schools, 24.26). More strikingly, nearly 4 of every 5 public school teachers in our survey had classes larger than the PTR figure. In terms of large classes alone, note that 679 of these public school teachers (13.8%) in Table 8.7 had classes of 36 or larger, and 1,581 or 32.2% (nearly one teacher out of every three) had classes of 31 pupils or more. Corresponding figures for separate schools are given in Table 8.8. For public and separate elementary schools, Table 8.6, the corresponding values are 893 (13.0%) and 2,172 (31.7%).

As in the case of secondary schools, it is clear that many classes are too large. They should be reduced to a size that gives some opportunity of realizing the goal of individualized instruction. This problem should be attacked directly, not by any "shotgun" approach through a "general" PTR.

Accordingly, I recommend:

In negotiations with school boards the teacher associations make elimination of large classes a first priority, making class size studies each year for elementary and secondary schools and working directly for a maximum size to be set instead of dealing with rather meaningless reductions of the average pupil-teacher ratio.

¹A detailed report for elementary schools on class size related to numerous factors has been prepared and will be published separately.

TABLE 8.7
CLASS SIZE IN ONTARIO PUBLIC SCHOOLS BY REGION, MAY 30, 1978⁽¹⁾

NUMBER OF PUPILS IN CLASS	R E G I O N									ALL REGIONS
	CENTRAL	EASTERN	MID NORTHERN	MID WESTERN	NORTH EASTERN	NIAGARA	NORTH WESTERN	OTTAWA VALLEY	WESTERN	
01 TO 05	35 1.8%	6 1.5%	2 1.2%	10 1.6%	3 1.9%	10 2.1%	5 3.0%	13 3.3%	7 1.2%	91 1.9%
06 TO 10	71 3.6	11 2.8	5 2.9	12 1.9	5 3.1	12 2.6	4 2.4	11 2.8	12 2.1	143 2.9
11 TO 15	82 4.2	15 3.8	11 6.4	32 5.2	6 3.8	24 5.1	14 8.5	18 4.5	24 4.3	226 4.6
16 TO 20	146 7.4	25 6.3	18 10.4	40 6.5	21 13.1	29 6.2	21 12.8	29 7.3	37 6.6	366 7.4
21 TO 25	282 14.3	81 20.3	34 19.6	87 14.1	42 26.3	75 16.1	40 24.4	68 17.2	97 17.2	806 16.4
26 TO 30	549 27.8	157 39.2	56 32.3	244 39.4	41 25.5	159 34.0	47 28.8	109 27.5	208 36.9	1,570 31.9
31 TO 35	384 19.4	66 16.5	28 16.2	106 17.1	22 13.8	103 22.1	18 11.0	70 17.7	105 18.8	902 18.4
36 TO 40	141 7.1	18 4.5	6 3.5	34 5.5	4 2.5	15 3.2	5 3.0	38 9.6	39 6.9	300 6.1
41 & OVER	214 10.8	13 3.3	8 4.6	38 6.1	16 10.0	28 6.0	8 4.9	29 7.3	25 4.4	379 7.7
NOT REPORTED	71 3.6	7 1.8	5 2.9	16 2.6	0 0.0	12 2.6	2 1.2	11 2.8	9 1.6	133 2.7
TOTAL	1,975 100.0	399 100.0	173 100.0	619 100.0	160 100.0	467 100.0	164 100.0	396 100.0	563 100.0	4,916 100.0

(1) At this date only 6 regions existed, but the analysis was done on the basis of the system of 9 regions of the previous year.

Source: Sample survey conducted by this Commission.

NUMBER OF PUPILS IN CLASS	R E G I O N									ALL REGIONS
	CENTRAL	EASTERN	MID NORTHERN	MID WESTERN	NORTH EASTERN	NIAGARA	NORTH WESTERN	OTTAWA VALLEY	WESTERN	
01 TO 05	11 1.8%	2 3.4%	2 2.5%	4 2.1%	2 1.4%	2 0.8%	3 3.4%	3 1.0%	2 0.9%	31 1.6%
06 TO 10	15 2.5	2 3.4	2 2.5	7 3.7	5 3.5	10 3.9	1 1.1	8 2.8	5 2.2	55 2.8
11 TO 15	24 3.9	2 3.4	2 2.5	7 3.7	8 5.7	9 3.5	3 3.4	18 6.3	6 2.6	79 4.1
16 TO 20	41 6.7	2 3.4	11 13.8	26 13.8	18 12.8	22 8.7	9 10.2	49 17.1	25 10.9	203 10.5
21 TO 25	91 14.9	13 22.5	22 27.5	32 16.9	35 24.8	62 24.4	19 21.6	82 28.8	28 12.2	384 19.8
26 TO 30	157 25.7	21 36.3	22 27.5	52 27.5	39 27.7	76 29.9	19 21.6	69 24.1	72 31.5	527 27.3
31 TO 35	165 27.1	9 15.5	14 17.4	31 16.4	15 10.6	36 14.2	13 14.9	28 9.8	65 28.4	376 19.4
36 TO 40	47 7.7	1 1.7	0 0.0	3 1.6	5 3.5	19 7.5	3 3.4	8 2.8	11 4.8	97 5.0
41 & OVER	34 5.6	3 5.2	2 2.5	20 10.6	8 5.7	14 5.5	14 15.9	12 4.2	9 3.9	116 6.0
NOT REPORTED	25 4.1	3 5.2	3 3.8	7 3.7	6 4.3	4 1.6	4 4.5	9 3.1	6 2.6	67 3.5
TOTAL	610 100.0	58 100.0	80 100.0	189 100.0	141 100.0	254 100.0	88 100.0	286 100.0	229 100.0	1,935 100.0

⁽¹⁾At this date only 6 regions existed, but the analysis was done on the basis of the system of 9 regions of the previous year.

Source: Sample survey conducted by this Commission.

I also recommend:

No further negotiations on the basis of the PTR alone be conducted by teachers or by boards.

Staff complements should be determined directly in light of needs, not through rigid application of a formula. I have attempted to cost out these recommendations but obviously we cannot do so without knowledge of the specific situations, which I do not have. It seems probable, however, that for the province as a whole the additional cost would not greatly exceed the savings accruing from the overall decline in enrolments.

8.2 Instructional Staff

I have treated separately teachers for elementary schools and for secondary, in part because their qualifications and salaries have differed so much. Under the new system of certification there would, of course, be no need to keep them separate in terms of the basic teaching certificate, but the associated document which would accompany each such certificate would, for many years, distinguish clearly between the two groups of teachers on the basis of academic and professional qualifications.

Before moving into the question of future demand, it will be helpful to provide a background of the years 1966 to 1978. Remember that the declines have been in effect in the elementary panel since 1971 whereas the decline in secondary schools is not likely to begin before September, 1979, at the earliest, except for a few school boards. The apparent changes in participation rates for students in secondary schools could result in the decline beginning this September, but we will not know until the figures for September 30, 1978, for the province as a whole, are compiled and released next spring.

The basic background data on secondary school teacher employment is provided in Table 8.9, being simple cross-classifications that show numbers of teachers and percentages, by age and sex of secondary school teachers from 1966 to 1978. I have presented the data by single years

TABLE B.9
SECONDARY SCHOOL TEACHERS IN ONTARIO: STOCK OF TEACHERS BY SEX AND AGE
1966-78

YEAR	SEX	AGE IN YEARS																				65 OR MORE		TOTAL																	
		20 OR LESS	21-24	25-29	30-34	35-39	40-44	45-49	50-54	55	56	57	58	59	60	61	62	63	64	65 OR MORE																					
1966-67	MALE	0	0	1202	76	2941	24.9	3223	20.4	2385	15.1	1784	11.3	1204	7.6	1014	6.4	140	0.9	146	0.9	171	1.1	133	0.8	108	0.7	79	0.5	57	0.4	43	0.3	29	0.2	14	0.1	15014	100.0		
	MALE	14	0	2	1856	24.8	1749	23.4	678	9.0	629	8.4	586	7.8	618	8.3	504	6.9	109	1.5	119	1.6	110	1.5	93	1.2	93	1.2	71	0.9	56	0.7	39	0.5	32	0.4	12	0.1	7489	100.0	
	TOTAL	14	0.1	2058	12.1	5690	24.4	3899	18.7	3014	23.5	2313	19.7	1822	15.4	1518	14.3	249	1.7	265	1.1	226	1.1	204	1.1	226	1.0	179	0.8	135	0.6	96	0.4	55	0.3	26	0.1	23303	100.0		
1967-68	MALE	0	0	1392	8.6	4672	25.1	3725	20.1	2810	15.2	2035	11.0	1413	7.8	1060	5.7	183	1.0	138	0.7	155	0.8	131	0.7	165	0.9	129	0.7	91	0.5	58	0.3	45	0.2	21	0.1	18487	100.0		
	MALE	14	0	2	1856	24.8	1749	23.4	678	9.0	629	8.4	586	7.8	618	8.3	504	6.9	109	1.5	119	1.6	110	1.5	93	1.2	93	1.2	71	0.9	56	0.7	39	0.5	29	0.3	9234	100.0			
	TOTAL	14	0.1	4219	12.5	6491	24.8	4311	21.5	3438	23.6	2653	16.9	1827	15.6	1564	14.1	302	1.1	257	0.9	273	1.0	224	0.9	259	0.9	219	0.8	147	0.4	94	0.3	64	0.2	27721	100.0				
1968-69	MALE	0	0	1792	9	5681	25.0	4633	20.2	3564	15.7	2727	9.8	1822	7.6	1057	5.2	223	1.1	185	0.9	138	0.7	146	0.7	130	0.6	152	0.7	117	0.6	76	0.4	54	0.3	46	0.2	20383	100.0		
	MALE	14	0	2	1856	24.8	1749	23.4	678	9.0	629	8.4	586	7.8	618	8.3	504	6.9	109	1.5	119	1.6	110	1.5	93	1.2	93	1.2	71	0.9	56	0.7	39	0.5	29	0.3	9234	100.0			
	TOTAL	14	0.1	4716	14.9	7446	25.3	5141	21.7	3828	23.9	2954	17.7	2125	17.4	1617	15.8	325	1.1	299	0.7	244	0.8	230	0.6	236	0.8	198	0.9	135	0.6	90	0.4	64	0.2	30253	100.0				
1969-70	MALE	0	0	1371	6.5	5355	25.3	4624	21.8	3589	15.6	2730	10.1	1777	8.4	1078	5.1	217	1.0	173	0.8	130	0.6	138	0.7	139	0.6	157	0.8	113	0.6	68	0.4	58	0.3	42	0.2	21101	100.0		
	MALE	14	0.1	2269	22.1	2915	29.2	1011	10.1	759	7.5	778	7.4	730	7.3	611	6.4	126	1.3	106	1.1	116	1.2	100	1.0	102	1.0	88	0.9	75	0.8	61	0.6	38	0.3	29	0.2	29759	100.0		
	TOTAL	13	0.1	3640	11.7	6270	26.5	5635	31.9	4157	23.1	3109	10.0	2507	8.0	1787	5.5	343	1.1	321	1.0	289	0.9	230	0.7	240	0.8	207	0.7	149	0.5	96	0.3	71	0.2	31156	100.0				
1970-71	MALE	0	0	892	4.1	5114	24.3	4749	22.6	3369	15.0	2492	11.9	1882	9.0	1178	5.4	193	0.9	205	1.0	204	1.0	170	0.8	122	0.6	137	0.7	109	0.5	113	0.5	66	0.3	45	0.2	2014	100.0		
	MALE	14	0.1	1783	18.9	2061	21.3	1054	10.4	832	8.4	774	6.6	724	6.6	632	6.7	125	1.3	118	1.2	97	1.0	109	0.8	141	1.0	95	1.0	72	0.8	61	0.6	47	0.5	9494	100.0				
	TOTAL	2	0.0	2675	8.1	7175	25.6	5803	33.9	4201	23.4	3265	18.5	2606	15.6	1810	12.1	318	1.0	323	1.1	301	1.0	279	0.9	216	0.9	248	0.9	174	0.6	117	0.4	104	0.3	20508	100.0				
1971-72	MALE	0	0	1572	12.1	4882	25.6	5192	24.1	3655	15.0	2728	12.7	1998	9.3	1555	5.8	201	0.9	180	0.9	201	0.9	199	0.9	157	0.7	100	0.5	108	0.5	81	0.4	74	0.3	49	0.2	29	0.1	21547	100.0
	MALE	14	0	2	1856	24.8	1749	23.4	678	9.0	629	8.4	586	7.8	618	8.3	504	6.9	109	1.5	119	1.6	110	1.5	93	1.2	93	1.2	71	0.9	56	0.7	39	0.5	29	0.3	9234	100.0			
	TOTAL	3	0.0	1633	15.2	6852	26.5	6382	29.5	4314	24.0	3383	20.3	2626	18.6	2159	11.6	314	1.0	312	1.0	317	1.0	300	1.0	249	0.8	177	0.6	188	0.5	146	0.4	120	0.3	49	0.2	31143	100.0		
1972-73	MALE	0	0	241	1.1	4143	19.3	6390	25.1	3796	14.8	2870	13.6	2044	9.7	1403	6.1	174	0.8	195	0.9	176	0.8	134	0.9	146	0.8	136	0.6	116	0.5	73	0.3	60	0.3	41	0.2	25	0.1	21085	100.0
	MALE	14	0	557	6.4	3196	36.8	1286	14.8	768	8.9	772	8.9	702	8.1	583	7.3	108	1.2	113	1.2	111	1.3	98	1.1	73	0.8	127	0.8	126	0.5	93	0.4	51	0.2	29759	100.0				
	TOTAL	4	0.0	798	2.3	7336	24.3	7676	25.1	4584	15.3	3642	12.7	2742	9.2	2036	6.8	283	1.3	303	1.2	286	1.0	281	0.9	243	0.8	207	0.7	126	0.4	117	0.4	97	0.3	82	0.3	35	0.1	51603	100.0
1973-74	MALE	1	0.0	203	0.9	4231	18.8	5698	25.3	4296	19.1	3061	13.6	2197	9.8	1571	7.0	208	0.9	173	0.8	187	0.8	164	0.7	158	0.7	127	0.6	87	0.4	48	0.2	36	0.2	17	0.1	22518	100.0		
	MALE	14	0.1	525	5.6	3500	37.2	1564	16.6	858	9.1	819	8.7	776	7.7	655	7.1	111	1.2	103	1.1	99	1.1	100	1.1	107	0.6	67	0.6	56	0.3	37	0.3	13	0.1	9397	100.0				
	TOTAL	6	0.0	729	2.3	7731	24.3	7262	24.5	5144	20.5	3880	14.2	2973	9.2	2236	9.2	319	1.0	276	0.9	286	0.9	248	0.8	248	0.6	187	0.6	143	0.5	92	0.3	66	0.3	42	0.2	3011	100.0		
1974-75	MALE	1	0.0	211	1.4	4211	14.6	5425	25.6	4820	20.6	3212	14.7	2236	10.2	1713	7.8	238	1.1	197	0.9	160	0.7	171	0.8	145	0.7	141	0.6	108	0.5	68	0.3	47	0.2	18	0.1	21919	100.0		
	MALE	14	0	2	1856	24.8	1749	23.4	678	9.0	629	8.4	586	7.8	618	8.3	504	6.9	109	1.5	119	1.6	110	1.5	93	1.2	93	1.2	71	0.9	56	0.7	39	0.5	29	0.3	9234	100.0			
	TOTAL	4	0.0	288	0.9	6174	20.1	7386	24.0	5417	17.6	3992	13.2	2796	10.3	2282	14.0	342	1.1	302	1.0	288	0.9	288	0.8	232	0.8	235	0.7	161	0.5	103	0.4	75	0.2	31	0.1	30716	100.0		
1975-76	MALE	1	0.0	53	0.2	2382	10.1	5431	25.1	4390	22.0	3371	15.3	2430	11.2	1808	8.4	264	1.2	224	1.1	194	0.9	169	0.7	158	0.7	135	0.6	97	0.4	53	0.3	39	0.2	21	0.1	21645	100.0		
	MALE	14	0	133	1.6	2433	29.7	1961	23.1	969	11.4	768	9.1	803	9.0	660	7.8	109	1.5	129	1.3	129	1.1	127	0.8	238	0.8	208	0.6	159	0.5	93	0.3	63	0.2	30716	100.0				
	TOTAL	3	0.0	186	0.6	4815	16.6	7392	24.5	5359	19.4	4099	13.6	2671	12.1	2068	8.2	373	1.2	341	1.1	289	1.0	227	0.8	238	0.8	208	0.6	159	0.5	93	0.3	63	0.2	31	0.1	30125	100.0		
1976-77	MALE	1	0.0	165	0.7	2524	10.9	5619	24.2	5120	22.0	3609	15.5	2764	11.5	1915	8.2	310	1.3	249	1.1	227	1.0	193	0.8	144	0.6	138	0.6	103	0.4	68	0.3	42	0.2	19	0.1	23920	100.0		
	MALE	14	0.1	308	3.2	2555	26.4	2428	25.1	1718	12.2	895	9.3	843	8.7	683	6.9	136	1.4	131	1.1	102	1.1	93	1.0	76	0.8	68	0.7	69	0.2	55	0.3	26	0.1	3660	100.0				
	TOTAL	7	0.0	473	3.9	5079	15.4	8047	24.4	6528	21.4	4504	13.7	2578	10.7	2578	10.7	446	1.4	355	1.1	329	1.0	272	0.9	270	0.7	206	0.6	177	0.5	105	0.4	68	0.2	36	0.1	30980	100.0		
1977-78	MALE	1	0.0	189	0.4	1808	7.9	5295	23.1	5394	23.5	3788	16.5	2860	12.5	1982	8.6	339	1.5	295	1.3	279	1.0	208	0.9	184	0.7	147	0.5	119	0.5	85	0.4	57	0.2	19	0.1	23928	100.0		
	MALE	14	0	2	1856	24.8	1749	23.4	678	9.0	629	8.4	586	7.8	618	8.3	504	6.9	109	1.5	119	1.6	110	1.5	93	1.2	93	1.2	71	0.9	56	0.7	39	0.5	29	0.3	9234	100.0			
	TOTAL	9	0.0	271	0.8	3786	11.7	7939	24.6	6322	20.9	4657	14.4	3714	11.5	2864	8.6	441	1.4	412	1.2	399	1.0	294	0.9	241	0.7	179	0.6	141	0.4	104	0.3	12	0.1	32229	100.0				

Sources: Annual computer files maintained by OSSTF.

of age from 55 to 64 and then lumped together those aged 65 or more (five-year age groups are used for the remaining sections). We have done this deliberately, as you would expect, because one means of relieving pressures on jobs (to prevent teachers being declared surplus or redundant, both horrible words with very unkind connotations) during the next 10 years is to encourage early retirements on a part-time or on a full-time basis. The figures give a fair idea of the extent of the relief which may be provided through early retirements, and I intend to support such a move in my recommendations. As I noted in my Second Interim Report, I commissioned two studies (Working Papers #7 and #26) of the Teacher's Supperannuation Fund, quite frankly to assess for myself the stability and actuarial soundness of the Fund and to gain some idea of the extent to which we could press forward with early retirements without jeopardizing its soundness. I was not willing to risk the long-term soundness of the pension plan for short-term relief in the form of early retirements, or partial retirements, seductive as such a move might prove to be. The results of my studies reveal that the Fund is undoubtedly the soundest in the province and not only can we ensure that present members can stop worrying about their basic pensions, but with early retirements we can do much to ensure the employment of younger teachers, who will help support the Fund through their contributions. As will be shown later, if greater use is made of the 90 factor in retirement and the pensions are supplemented through annuities, the amount of relief which can be provided at the secondary level in particular through early retirement is substantial.

Some indication of the effect of the 90 factor on secondary schools can be secured from a study of Table 8.10. Later we show a more informative and helpful breakdown of those with 9 or more years of experience, again separately by sex since the numbers and percentages by sex differ markedly. The experience data of Table 8.10 does, of course, reflect the age distributions of Table 8.9, and it is clear that, later, large numbers of teachers will be retiring within a few years of each other (the Teacher Bust will be a reflection of the Baby Bust).

Tables 8.11, 8.12, 8.13 and 8.14 give further data on the secondary school teachers: by sex and qualifications, sex and degree, sex and

YEAR	SEX	EXPERIENCE (YEARS)																								TOTAL	
		0		1		2		3		4		5		6		7		8		9 OR MORE							
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%				
1966-67	MALE	2707	16.2	2172	13.0	1625	9.7	1698	10.1	1409	8.4	910	5.4	752	4.5	724	4.3	573	3.4	4168	24.9	16738	100.0				
	FEMALE	2015	24.0	1428	17.0	1007	12.0	823	9.8	532	6.3	377	4.5	251	3.0	220	2.6	209	2.5	1540	18.3	8402	100.0				
	TOTAL	4722	18.8	3600	14.3	2632	10.5	2521	10.0	1941	7.7	1287	5.1	1003	4.0	944	3.8	782	3.1	5708	22.7	25140	100.0				
1967-68	MALE	3028	16.2	2365	12.6	2010	10.7	1520	8.1	1619	8.6	1363	7.3	890	4.8	736	3.9	697	3.7	4502	24.0	18730	100.0				
	FEMALE	2144	22.8	1659	17.6	1216	12.9	867	9.2	692	7.4	474	5.0	298	3.2	223	2.4	208	2.2	1624	17.3	9405	100.0				
	TOTAL	5172	18.4	4024	14.3	3226	11.5	2387	8.5	2311	8.2	1837	6.5	1188	4.2	959	3.4	905	3.2	6126	21.4	28135	100.1				
1968-69	MALE	2924	14.2	2683	13.1	2155	10.5	1886	9.2	1450	7.1	1556	7.6	1314	6.4	864	4.2	712	3.5	4996	24.3	20540	100.0				
	FEMALE	2014	20.0	1779	17.6	1408	14.0	1056	10.5	705	7.0	568	5.6	430	4.3	261	2.6	197	2.0	1675	16.6	10093	100.0				
	TOTAL	4938	16.1	4462	14.6	3563	11.6	2942	9.6	2155	7.0	2124	6.9	1744	5.7	1125	3.7	909	3.0	6671	21.8	30633	100.0				
1969-70	MALE	2789	12.6	2628	11.9	2493	11.2	2036	9.2	1803	8.1	1397	6.3	1517	6.8	1270	5.7	839	3.8	5401	24.4	22173	100.0				
	FEMALE	2003	18.5	1749	16.1	1540	14.2	1170	10.8	898	8.3	602	5.6	509	4.7	382	3.5	242	2.2	1738	16.0	10833	100.0				
	TOTAL	4792	14.5	4377	13.3	4033	12.2	3206	9.7	2701	8.2	1999	6.1	2026	6.1	1652	5.0	1081	3.3	7139	21.6	33006	100.0				
1970-71	MALE	1989	8.7	2311	10.1	2427	10.6	2340	10.2	1940	8.5	1745	7.6	1366	6.0	1479	6.5	1240	5.4	6011	26.3	22848	100.0				
	FEMALE	1724	15.6	1553	14.1	1515	13.8	1329	12.1	1005	9.1	766	7.0	517	4.7	454	4.1	342	3.1	1812	16.4	11017	100.0				
	TOTAL	3713	11.0	3864	11.4	3942	11.6	3669	10.8	2945	8.7	2511	7.4	1883	5.6	1933	5.7	1582	4.7	7823	23.1	33865	100.0				
1971-72	MALE	1608	6.9	1745	7.5	2061	8.8	2344	10.0	2253	9.6	1909	8.2	1701	7.3	1337	5.7	1456	6.2	6959	29.8	23373	100.0				
	FEMALE	1380	12.3	1531	13.6	1303	11.6	1377	12.3	1180	10.5	890	7.9	694	6.2	469	4.2	423	3.8	1993	17.7	11240	100.0				
	TOTAL	2988	8.6	3276	9.5	3364	9.7	3721	10.8	3433	9.9	2799	8.1	2395	6.9	1806	5.2	1879	5.4	8952	25.9	34613	100.0				
1972-73	MALE	2583	11.0	94	0.4	1686	7.2	1975	8.4	2229	9.5	2170	9.2	1838	7.8	1667	7.1	1306	5.5	7997	34.0	23545	100.0				
	FEMALE	2096	19.4	80	0.7	1351	12.5	1133	10.5	1200	11.1	1009	9.4	768	7.1	590	5.5	423	3.9	2128	19.7	10778	100.0				
	TOTAL	4679	13.6	174	0.5	3037	8.8	3108	9.1	3429	10.0	3179	9.3	2606	7.6	2257	6.6	1729	5.0	10125	29.5	34323	100.0				
1973-74	MALE	945	4.0	1303	5.5	1170	5.0	1600	6.8	1872	7.9	2173	9.2	2126	9.0	1804	7.6	1651	7.0	8970	38.0	23614	100.0				
	FEMALE	820	7.8	1004	9.5	964	9.2	1182	11.2	1015	9.6	1042	9.9	904	8.6	704	6.7	538	5.1	2350	22.3	10523	100.0				
	TOTAL	1765	5.2	2307	6.8	2134	6.3	2782	8.1	2887	8.5	3215	9.4	3030	8.9	2508	7.3	2189	6.4	11320	33.2	34137	100.0				
1974-75	MALE	1123	4.7	850	3.6	1210	5.1	1098	4.6	1546	6.5	1788	7.5	2083	8.7	2050	8.6	1763	7.4	10295	43.2	23806	100.0				
	FEMALE	1039	9.8	714	6.7	914	8.6	864	8.2	1069	10.1	941	8.9	926	8.7	831	7.8	633	6.0	2669	25.2	10600	100.0				
	TOTAL	2162	6.3	1564	4.5	2124	6.2	1962	5.7	2615	7.6	2729	7.9	3009	8.7	2881	8.4	2396	7.0	12964	37.7	34406	100.0				
1975-76	MALE	1221	5.0	1087	4.5	823	3.4	1167	4.8	1088	4.5	1491	6.1	1748	7.2	2040	8.4	2004	8.2	11730	48.1	24399	100.0				
	FEMALE	1137	10.3	973	8.8	644	5.8	853	7.7	814	7.4	978	8.9	881	8.0	846	7.7	769	7.0	3116	28.3	11011	100.0				
	TOTAL	2358	6.7	2060	5.8	1467	4.1	2020	5.7	1902	5.4	2469	7.0	2629	7.4	2886	8.2	2773	7.8	14846	41.9	35410	100.0				
1976-77	MALE	1149	4.6	1101	4.4	1006	4.1	822	3.3	1138	4.6	1070	4.3	1462	5.9	1708	6.9	2003	8.1	13373	53.9	24832	100.0				
	FEMALE	1055	9.4	980	8.7	902	8.0	601	5.3	792	7.0	754	6.7	921	8.2	813	7.2	793	7.0	3645	32.4	11256	100.0				
	TOTAL	2204	6.1	2081	5.8	1908	5.3	1423	3.9	1930	5.3	1824	5.1	2383	6.6	2521	7.0	2796	7.7	17018	47.2	36088	100.0				
1977-78	MALE	835	3.3	1020	4.1	1046	4.2	970	3.9	809	3.2	1123	4.5	1064	4.3	1446	5.8	1682	6.7	15033	60.1	25028	100.0				
	FEMALE	784	6.9	934	8.2	902	8.0	853	7.5	575	5.1	760	6.7	715	6.3	859	7.6	773	6.8	4171	36.8	11326	100.0				
	TOTAL	1619	4.5	1954	5.4	1948	5.4	1823	5.0	1384	3.8	1883	5.2	1779	4.9	2305	6.3	2455	6.8	19204	52.8	36354	100.0				

TABLE 8.11

SECONDARY SCHOOL TEACHERS IN ONTARIO: STOCK OF TEACHERS BY SEX AND QUALIFICATION CATEGORY
1966-78

YEAR	SEX	CATEGORY										TOTAL	
		0 (1)		1		2		3		4			
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1966-67	MALE	4,666	27.9	3,372	20.1	2,734	16.3	2,374	14.2	3,289	21.4	16,735	100.0
	FEMALE	3,517	41.9	1,597	19.0	1,220	14.5	737	8.8	1,331	15.8	8,402	100.0
	TOTAL	8,183	33.9	4,969	20.6	3,954	16.4	3,111	12.9	3,920	16.4	24,137	100.0
1967-68	MALE	6,212	33.2	3,133	16.7	2,840	15.2	2,664	14.2	3,878	20.7	18,727	100.0
	FEMALE	4,542	48.3	1,357	14.4	1,339	14.2	792	8.4	1,375	14.6	9,405	100.0
	TOTAL	10,754	38.2	4,490	16.0	4,179	14.9	3,456	12.3	5,253	18.7	28,132	100.1
1968-69	MALE	7,349	35.8	2,874	14.0	2,987	14.5	3,069	14.9	4,261	20.7	20,540	100.0
	FEMALE	5,247	52.0	1,192	11.8	1,419	14.1	849	8.4	1,386	13.7	10,093	100.0
	TOTAL	12,596	41.1	4,066	13.3	4,406	14.9	3,918	12.8	5,647	18.4	30,633	100.0
1969-70	MALE	7,728	34.9	2,782	12.5	3,428	15.5	3,402	15.3	4,833	21.8	2,2173	100.0
	FEMALE	5,522	51.0	1,164	10.7	1,719	15.9	945	8.7	1,483	13.7	10,833	100.0
	TOTAL	13,250	40.1	3,946	12.0	5,147	15.6	4,347	13.2	6,316	19.1	33,006	100.0
1970-71	MALE	8,507	37.2	2,679	11.7	3,465	15.2	3,166	13.9	5,031	22.0	22,848	100.0
	FEMALE	6,011	54.6	1,073	9.7	1,646	14.9	866	7.9	1,421	12.9	11,017	100.0
	TOTAL	14,518	42.9	3,752	11.1	5,111	15.1	4,032	11.9	6,452	19.1	33,865	100.0
1971-72	MALE	4,918	21.0	2,488	10.6	4,297	18.4	3,567	15.3	8,103	34.7	23,373	100.0
	FEMALE	3,636	32.3	1,142	10.2	2,846	25.3	1,148	10.2	2,468	22.0	11,240	100.0
	TOTAL	8,554	24.7	3,630	10.5	7,143	20.6	4,715	13.6	10,571	30.5	34,613	100.0
1972-73	MALE	5,032	21.4	2,336	9.9	4,354	18.5	3,433	14.6	8,390	35.6	23,545	100.0
	FEMALE	3,466	32.2	1,025	9.5	2,754	25.6	1,085	10.1	2,448	22.7	10,778	100.0
	TOTAL	8,498	24.8	3,361	9.8	7,108	20.7	4,518	13.2	10,838	31.6	34,323	100.0
1973-74	MALE	2,785	11.8	2,137	9.1	3,850	16.3	3,705	15.7	11,136	47.2	23,613	100.0
	FEMALE	2,026	19.3	953	9.1	2,966	28.2	1,332	12.7	3,246	30.8	10,523	100.0
	TOTAL	4,811	14.1	3,090	9.1	6,816	20.0	5,037	14.8	14,382	42.1	34,136	100.0
1974-75	MALE	2,729	11.5	1,946	8.2	3,489	14.7	3,732	15.7	11,910	50.9	23,806	100.0
	FEMALE	1,949	18.4	844	8.0	2,832	26.7	1,419	13.4	3,555	33.5	10,599	100.0
	TOTAL	4,678	13.6	2,790	8.1	6,321	18.4	5,151	15.0	15,465	44.9	34,405	100.0
1975-76	MALE	2,527	10.4	1,807	7.4	3,153	12.9	3,719	15.2	13,193	54.1	24,399	100.0
	FEMALE	1,705	15.5	729	6.6	2,782	25.3	1,655	15.0	4,139	37.6	11,010	100.0
	TOTAL	4,232	12.0	2,536	7.2	5,935	16.8	5,374	15.2	17,332	48.9	35,409	100.0
1976-77	MALE	2,231	9.0	1,773	7.1	3,044	12.3	3,708	14.9	14,075	56.7	24,831	100.0
	FEMALE	1,406	12.5	674	6.0	2,710	24.1	1,783	15.8	4,682	41.6	11,255	100.0
	TOTAL	3,637	10.1	2,447	6.8	5,754	15.9	5,491	15.2	18,757	52.0	36,086	100.0
1977-78	MALE	2,168	8.7	1,714	6.8	2,931	11.7	3,567	14.3	14,648	58.5	25,038	100.0
	FEMALE	1,350	11.9	605	5.3	2,558	22.6	1,821	16.1	4,991	44.1	11,325	100.0
	TOTAL	3,518	9.7	2,319	6.4	5,489	15.1	5,388	14.8	19,639	54.0	36,352	100.0

(1) Includes others and not reported.

Source: Annual computer files maintained by OSSTF.

TABLE 8.12

SECONDARY SCHOOL TEACHERS IN ONTARIO: STOCK OF TEACHERS BY SEX AND DEGREE
1966-77

YEAR	SEX	D E G R E E								TOTAL	
		NO DEGREE*		BACHELOR		MASTER		DOCTRATE			
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1966-67	MALE	3,809	22.8	11,708	69.9	1,177	7.0	44	0.3	16,738	100.0
	FEMALE	1,684	20.0	6,325	75.3	378	4.5	15	0.2	8,402	100.0
	TOTAL	5,493	21.8	18,033	71.7	1,555	6.2	59	0.2	25,140	100.0
1967-68	MALE	4,492	24.0	12,880	68.8	1,298	6.9	60	0.3	18,730	100.0
	FEMALE	1,879	20.0	7,067	75.1	439	4.7	20	0.2	9,405	100.0
	TOTAL	6,371	22.6	19,947	70.9	1,737	6.2	80	0.3	28,135	100.0
1968-69	MALE	4,770	23.2	14,236	69.3	1,460	7.1	74	0.4	20,540	100.0
	FEMALE	1,869	18.5	7,715	76.4	481	4.8	28	0.3	10,093	100.0
	TOTAL	6,639	21.7	21,951	71.7	1,941	6.3	102	0.3	30,633	100.0
1969-70	MALE	5,119	23.1	15,321	69.1	1,648	7.4	85	0.4	22,173	100.0
	FEMALE	2,079	19.2	8,156	75.3	550	5.1	48	0.4	10,833	100.0
	TOTAL	7,198	21.8	23,477	71.1	2,198	6.7	133	0.4	33,006	100.0
1970-71	MALE	5,064	22.2	15,848	69.4	1,849	8.1	87	0.4	22,848	100.0
	FEMALE	1,962	17.8	8,361	75.9	639	5.8	55	0.5	11,017	100.0
	TOTAL	7,026	20.7	24,209	71.5	2,488	7.3	142	0.4	33,865	99.9
1971-72	MALE	4,819	20.6	16,388	70.1	2,153	9.2	13	0.1	23,373	100.0
	FEMALE	1,809	16.1	8,744	77.8	670	6.0	17	0.2	11,240	100.0
	TOTAL	6,628	19.1	25,132	72.6	2,823	8.2	30	0.1	34,613	100.0
1972-73	MALE	4,594	19.5	16,556	70.3	2,371	10.1	24	0.1	23,545	100.0
	FEMALE	1,572	14.6	8,506	78.9	683	6.3	17	0.2	10,778	100.0
	TOTAL	6,166	18.0	25,062	73.0	3,054	8.9	41	0.1	34,323	100.0
1973-74	MALE	4,519	19.1	16,547	70.1	2,525	10.7	23	0.1	23,614	100.0
	FEMALE	1,513	14.4	8,322	79.1	672	6.4	16	0.2	10,523	100.0
	TOTAL	6,032	17.7	24,869	72.9	3,197	9.4	39	0.1	34,137	100.1
1974-75	MALE	4,325	18.2	16,717	70.2	2,737	11.5	26	0.1	23,805	100.0
	FEMALE	1,398	13.2	8,472	79.9	712	6.7	18	0.2	10,600	100.0
	TOTAL	5,723	16.6	25,189	73.2	3,449	10.0	44	0.1	34,405	100.0
1975-76	MALE	4,291	17.6	17,108	70.1	2,969	12.2	31	0.1	24,399	100.0
	FEMALE	1,298	11.8	8,914	81.0	780	7.1	19	0.2	11,011	100.0
	TOTAL	5,589	15.8	26,022	73.5	3,749	10.6	50	0.1	35,410	100.0
1976-77	MALE	4,204	16.9	17,353	69.9	3,245	13.1	30	0.1	24,832	100.0
	FEMALE	1,203	10.7	9,176	81.5	857	7.6	18	0.2	11,254	100.0
	TOTAL	5,407	15.0	26,529	73.5	4,102	11.4	48	0.1	36,086	100.0
1977-78	MALE	4,057	16.2	17,467	69.8	3,468	13.9	36	0.1	25,028	100.0
	FEMALE	1,013	8.9	9,361	82.7	933	8.2	19	0.2	11,326	100.0
	TOTAL	5,070	13.9	26,828	73.8	4,401	12.1	55	0.2	36,354	100.0

*Also includes those who did not report their academic qualifications.

Source: Annual computer files maintained by OSSTF.

TABLE 8.13

SECONDARY SCHOOL TEACHERS IN ONTARIO: STOCK OF TEACHERS BY SEX AND SALARY

1966-78

YEAR	SEX	S A L A R Y																												TOTAL	
		5,999 OR LESS		6,000-7,999		8,000-9,999		10,000-11,999		12,000-13,999		14,000-15,999		16,000-17,999		18,000-19,999		20,000-21,000		22,000-23,999		24,000-25,999		26,000 OR MORE							
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%				
1966-67	MALE	1,345	8.1	5,878	35.3	4,530	27.2	2,676	16.1	1,567	9.4	432	2.6	225	1.4	5	0	0	0	0	0	0	0	0	0	0	16,658	100.0			
	FEMALE	1,680	10.1	3,579	42.9	1,772	21.2	941	11.3	354	4.2	22	0.3	2	0.0	0	0	0	0	0	0	0	0	0	0	8,350	100.0				
	TOTAL	3,025	12.1	9,457	37.8	6,302	25.2	3,617	14.5	1,921	7.7	459	1.8	277	0.9	5	0	0	0	0	0	0	0	0	0	25,008	100.0				
1967-68	MALE	138	0.7	5,008	26.8	5,639	30.2	3,670	19.6	2,248	12.0	1,216	6.5	439	2.3	261	1.4	72	0.4	2	0	0	0	0	0	0	18,693	100.0			
	FEMALE	304	3.2	4,352	46.5	2,386	25.5	1,273	13.6	756	8.1	276	2.9	17	0.2	3	0.0	1	0.0	0	0	0	0	0	0	9,368	100.0				
	TOTAL	442	1.6	9,360	33.4	8,025	28.6	4,943	17.6	3,004	10.7	1,492	5.3	456	1.6	264	0.9	73	0.3	2	0	0	0	0	0	28,061	100.0				
1968-69	MALE	66	0.3	4,252	20.7	6,158	30.0	4,443	21.7	2,616	12.8	1,846	9.0	626	3.1	292	1.4	207	1.0	8	0	1	0	0	0	0	20,515	100.0			
	FEMALE	232	2.3	3,969	39.4	2,988	29.7	1,544	15.3	807	8.0	493	4.9	32	0.3	2	0.0	2	0.0	0	0	0	0	0	0	10,069	100.0				
	TOTAL	298	1.0	8,221	26.9	9,146	29.9	5,987	19.6	3,423	11.2	2,339	7.6	658	2.2	294	1.0	209	0.7	8	0	1	0	0	0	30,584	100.0				
1969-70	MALE	59	0.3	2,752	12.5	6,375	28.9	5,342	24.2	3,113	14.1	2,386	10.8	1,167	5.3	438	2.0	386	1.8	38	0.2	0	0	1	0	22,057	100.0				
	FEMALE	233	2.2	2,817	26.3	3,697	34.5	2,113	19.7	890	8.3	761	7.1	185	1.7	15	0.1	3	0.0	0	0	0	0	0	0	10,714	100.0				
	TOTAL	292	0.9	5,569	17.0	10,072	30.7	7,455	22.7	4,003	12.2	3,147	9.6	1,352	4.1	453	1.4	389	1.2	38	0.1	0	0	1	0	32,771	100.0				
1970-71	MALE	34	0.1	1,496	6.6	5,516	24.2	5,391	23.7	4,055	17.8	2,905	12.8	2,115	9.3	709	3.1	286	1.3	261	1.1	0	0	0	0	22,768	100.0				
	FEMALE	160	1.5	1,780	16.2	4,003	36.4	2,247	20.5	1,397	12.7	859	7.8	491	4.5	43	0.4	5	0.0	1	0.0	0	0	0	0	10,986	100.0				
	TOTAL	194	0.6	3,276	9.7	9,519	28.2	7,638	22.6	5,452	16.2	3,764	11.2	2,606	7.7	752	2.2	291	0.9	262	0.8	0	0	0	0	33,754	100.0				
1971-72	MALE	31	0.1	937	4.0	4,366	18.7	5,126	22.0	4,731	20.3	3,539	15.2	2,919	12.5	870	3.7	396	1.7	409	1.8	20	0.1	0	0	23,344	100.0				
	FEMALE	209	1.9	1,260	11.2	3,603	32.2	2,492	22.2	1,879	16.8	942	8.4	699	6.2	101	0.9	17	0.2	3	0.0	0	0	0	0	11,205	100.0				
	TOTAL	240	0.7	2,197	6.4	7,969	23.1	7,618	22.0	6,610	19.1	4,481	13.0	3,618	10.5	971	2.8	413	1.2	412	1.2	20	0.1	0	0	34,549	100.0				
1972-73	MALE	34	0.2	390	2.2	3,222	14.3	4,310	19.1	4,907	21.8	3,423	15.2	3,456	15.3	1,703	7.6	489	2.2	373	1.7	97	0.4	18	0.1	22,522	100.0				
	FEMALE	123	1.2	600	5.9	2,899	28.5	2,374	23.4	2,025	19.9	942	9.3	889	8.8	262	2.6	22	0.2	8	0.1	0	0	12	0.1	10,156	100.0				
	TOTAL	157	0.5	1,090	3.3	6,121	18.7	6,684	20.5	6,932	21.2	4,365	13.4	4,345	13.4	1,965	6.0	511	1.6	382	1.2	97	0.3	30	0.1	32,678	100.0				
1973-74	MALE	47	0.2	308	1.3	2,067	8.8	3,985	17.0	4,795	20.4	3,977	16.9	3,907	16.6	2,965	12.6	686	2.9	384	1.6	353	1.5	11	0.0	23,485	100.0				
	FEMALE	172	1.7	401	3.8	2,082	20.0	2,628	25.2	2,098	20.1	1,408	13.5	1,011	9.7	543	5.2	51	0.5	16	0.2	5	0.0	3	0.0	10,418	100.0				
	TOTAL	219	0.6	709	2.1	4,149	12.2	6,613	19.5	6,893	20.3	5,385	15.9	4,918	14.5	3,508	10.3	737	2.2	400	1.2	358	1.1	14	0.4	33,903	100.0				
1974-75	MALE	22	0.1	205	0.9	965	4.2	2,681	11.5	3,613	15.5	4,654	20.0	3,420	14.7	3,799	16.3	2,534	10.9	730	3.1	257	1.1	365	1.6	23,245	100.0				
	FEMALE	137	1.4	352	3.5	1,031	10.2	2,093	20.7	2,100	20.8	1,967	19.4	1,032	10.2	913	9.0	417	4.1	58	0.6	10	0.1	6	0.1	10,116	100.0				
	TOTAL	159	0.5	557	1.7	1,996	6.0	4,774	14.3	5,713	14.3	6,621	19.8	4,452	13.3	4,712	14.1	2,951	8.8	788	2.4	267	0.8	371	1.1	33,361	100.0				
1975-76	MALE	23	0.1	143	0.6	462	2.0	1,317	5.6	2,266	9.6	3,336	14.2	3,597	15.3	3,887	16.5	3,726	15.8	2,443	10.4	1,471	6.2	886	3.8	23,557	100.0				
	FEMALE	112	1.1	369	3.6	639	6.2	1,240	12.1	1,724	16.8	1,890	18.4	1,490	14.5	1,307	12.8	835	8.1	422	4.1	186	1.8	33	0.3	10,247	100.0				
	TOTAL	135	0.4	512	1.5	1,101	3.3	2,557	7.6	3,990	11.8	5,226	15.5	5,087	15.0	5,194	15.4	4,561	13.5	2,865	8.5	1,657	4.9	919	2.7	33,804	100.0				
1976-77	MALE	13	0.1	11	0.0	46	0.2	365	1.6	821	3.6	1,491	6.6	2,343	10.4	3,105	13.7	3,255	14.4	3,726	16.5	3,931	17.4	3,496	15.5	22,603	100.0				
	FEMALE	43	0.4	127	1.3	199	2.1	463	4.8	805	8.3	1,264	13.0	1,423	14.7	1,620	16.7	1,379	14.2	1,066	11.0	861	8.9	436	4.5	9,686	100.0				
	TOTAL	56	0.2	138	0.4	245	0.8	828	2.6	1,626	5.0	2,755	8.5	3,766	11.7	4,725	14.6	4,634	14.4	4,792	14.8	4,792	14.8	3,932	12.2	32,289	100.0				
1977-78	MALE	13	0.1	21	0.1	9	0.0	149	0.6	431	1.8	1,028	4.2	1,547	6.3	2,439	9.9	3,348	13.6	3,171	12.9	4,899	19.9	7,540	30.7	24,595	100.0				
	FEMALE	35	0.3	95	0.9	202	1.9	277	2.6	532	4.9	992	9.2	1,313	12.2	1,466	13.6	1,852	17.2	1,367	12.7	1,543	13.5	1,187	11.0	10,771	100.0				
	TOTAL	48	0.1	116	0.3	211	0.6	426	1.2	963	2.7	2,020	5.7	2,860	8.1	3,905	11.0	5,200	14.7	4,538	12.8	6,352	18.0	8,727	24.7	35,366	100.0				

YEAR	SEX	P O S I T I O N																TOTAL			
		PRINCIPAL		VICE-PRINCIPAL		CO-ORDINATOR		DIRECTOR		DEPARTMENT HEAD		ASSISTANT DEPARTMENT HEAD		SUBJECT CHAIRMAN		MASTER TEACHER				TEACHER	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1966-67	MALE	535	3.2	506	3.0	52	0.3	216	1.3	3194	19.1	0	0	0	0	0	0	12225	73.1	16728	100.0
	FEMALE	8	0.1	9	0.1	12	0.1	22	0.3	872	10.4	0	0	0	0	0	0	7472	89.0	8395	100.0
	TOTAL	543	2.2	515	2.0	64	0.3	238	0.9	4066	16.2	0	0	0	0	0	0	19697	78.4	25123	100.0
1967-68	MALE	552	2.9	557	3.0	127	0.7	298	1.6	3428	18.3	0	0	0	0	0	0	13757	73.5	18719	100.0
	FEMALE	4	0.0	11	0.1	27	0.3	33	0.4	931	9.9	0	0	0	0	0	0	8390	89.3	9396	100.0
	TOTAL	556	2.0	568	2.0	154	0.5	331	1.2	4359	15.5	0	0	0	0	0	0	22147	78.8	28115	100.0
1968-69	MALE	559	2.7	607	3.0	181	0.9	385	1.9	3750	18.3	1186	5.6	0	0	0	0	13866	67.5	20534	100.0
	FEMALE	7	0.1	13	0.1	36	0.4	40	0.4	955	9.5	387	3.8	0	0	0	0	8650	85.7	10088	100.0
	TOTAL	566	1.8	620	2.0	217	0.7	425	1.4	4705	15.4	1573	5.1	0	0	0	0	22516	73.5	30622	100.0
1969-70	MALE	569	2.6	658	3.0	196	0.9	427	1.9	4034	18.2	1667	7.5	66	0.3	0	0	14543	65.6	22160	100.0
	FEMALE	7	0.1	19	0.2	46	0.4	38	0.4	1014	9.4	527	4.9	26	0.2	0	0	9143	84.5	10820	100.0
	TOTAL	576	1.7	677	2.1	242	0.7	465	1.4	5048	15.3	2194	6.7	92	0.3	0	0	23686	71.8	32980	100.0
1970-71	MALE	586	2.5	698	3.1	165	0.7	461	2.0	4196	18.4	1879	8.2	160	0.7	8	0	14703	64.4	22838	100.0
	FEMALE	8	0.1	20	0.2	25	0.2	42	0.4	1051	9.5	555	5.0	79	0.7	2	0	9224	83.4	11006	100.0
	TOTAL	594	1.8	718	2.1	190	0.6	503	1.5	5247	15.5	2434	7.2	239	0.7	10	0	23927	70.7	33844	100.0
1971-72	MALE	572	2.4	704	3.0	154	0.7	475	2.0	4281	18.3	2048	8.8	228	1.0	18	0.1	14883	63.7	23363	100.0
	FEMALE	9	0.1	25	0.2	26	0.2	39	0.3	1023	9.1	613	5.5	122	1.1	6	0.1	9370	83.4	11233	100.0
	TOTAL	581	1.7	729	2.1	180	0.5	514	1.5	5304	15.3	2661	7.7	350	1.0	24	0.1	24253	70.1	34596	100.0
1972-73	MALE	576	2.4	716	3.0	174	0.7	510	2.2	4301	18.3	2093	8.9	320	1.4	18	0.1	14829	63.0	23537	100.0
	FEMALE	10	0.1	29	0.3	31	0.3	43	0.4	1010	9.4	643	6.0	143	1.3	9	0.1	8850	82.2	10768	100.0
	TOTAL	586	1.7	745	2.2	205	0.6	553	1.6	5311	15.5	2736	8.0	463	1.3	27	0.1	23679	69.0	34305	100.0
1973-74	MALE	578	2.4	720	3.0	183	0.8	509	2.2	4341	18.4	2166	9.2	319	1.4	20	0.1	14771	62.6	23607	100.0
	FEMALE	10	0.1	31	0.3	22	0.2	37	0.4	988	9.4	652	6.2	139	1.3	2	0.0	8634	82.1	10515	100.0
	TOTAL	588	1.7	751	2.2	205	0.6	546	1.6	5329	15.6	2818	8.3	458	1.3	22	0.1	23405	68.6	34122	100.0
1974-75	MALE	575	2.4	722	3.0	205	0.9	512	2.2	4355	18.3	2227	9.4	332	1.4	17	0.1	14852	62.4	23797	100.0
	FEMALE	13	0.1	32	0.3	32	0.3	33	0.3	1019	9.6	671	6.3	152	1.4	3	0.0	8639	81.5	10594	100.0
	TOTAL	588	1.7	754	2.2	237	0.7	545	1.6	5374	15.6	2898	8.4	484	1.4	20	0.1	23491	68.3	34391	100.0
1975-76	MALE	571	2.3	736	3.0	221	0.9	511	2.1	4487	18.4	2293	9.4	329	1.3	18	0.1	15228	62.4	24394	100.0
	FEMALE	12	0.1	40	0.4	45	0.4	35	0.3	1084	9.8	712	6.5	147	1.3	4	0.0	8927	81.1	11006	100.0
	TOTAL	583	1.6	776	2.2	266	0.8	546	1.5	5571	15.7	3005	8.5	476	1.3	22	0.1	24155	68.2	35400	100.0
1976-77	MALE	572	2.3	751	3.0	231	0.9	494	2.0	4524	18.2	2180	8.8	323	1.3	12	0.0	15741	63.4	24828	100.0
	FEMALE	12	0.1	41	0.4	47	0.4	33	0.3	1124	10.0	663	5.9	143	1.3	5	0.0	9181	81.6	11249	100.0
	TOTAL	584	1.6	792	2.2	278	0.8	527	1.5	5648	15.7	2843	7.9	466	1.3	17	0.0	24922	69.1	36077	100.0
1977-78	MALE	573	2.3	764	3.1	252	1.0	476	1.9	4565	18.2	2180	8.7	329	1.3	14	0.1	15871	63.4	25024	100.0
	FEMALE	16	0.1	49	0.4	52	0.5	31	0.3	1133	10.0	675	6.0	145	1.3	4	0.0	9216	81.4	11321	100.0
	TOTAL	589	1.6	813	2.2	304	0.8	507	1.4	5698	15.7	2855	7.9	474	1.3	18	0.0	25087	69.0	36345	100.0

salary, and sex and responsibility or position category. The shift in levels of salaries is quite evident in Table 8.13.

Equivalent data for elementary schools has been given in Tables 8.15 (not as detailed as Table 8.9) to 8.18 inclusive. The picture is generally the same, of course, but the teachers are younger and consequently the relief possible from early retirement is somewhat less. Still, much can be done to relieve the pressures. The dangers of the present situation, as well as some of the corrective actions which simply must be taken for the health of the school system and to preserve the morale of the teachers now in the profession, are clearly stated in the Commission's Working Paper #12 by Hunt and Hunt. It is clear that for the next 10 to 15 years there will not be many changes among the permanent staff, in the sense of adding young teachers on other than short-term appointments or in supply-teaching positions, so that newly graduated teachers will continue to have great difficulty in securing positions.

In the chapter on Teacher Education I reported in detail on the rather sobering results of the Hansen FLEXOR Teacher Education Computer Model study of teacher demand. I have also had prepared, in the Department of Educational Planning at OISE, a number of other tables on teacher demand, for the province as a whole and for the major subjects for secondary schools. Tables 8.19 and 8.20 give the picture of the future of teacher demand as we see it, in light of the enrolment projections presented in an earlier chapter. They show for 1978 to 2001, by each year for the province as a whole, the projected demand for teachers in elementary and secondary schools separately. But first, let us look at the following table:

Year	Public School Enrolment	Number of Teachers		Pupil-Teacher Ratios	
		Total Teachers	Classroom Teachers	Total Teachers	Classroom Teachers
1971	1,034,703	41,583	N/A	24.88	N/A
1972	1,022,935	41,163	35,350	24.85	28.94
1973	998,668	39,803	34,440	25.09	29.00
1974	977,545	39,748	34,514	24.59	28.32
1975	961,625	40,711	33,603	23.62	28.62
1976	937,292	40,464	33,315	23.16	28.13
1977	907,777*	40,559*	32,768	22.38	27.70

*Education Statistics Ontario, 1977, Ministry of Education, pp. 41, 78.

ELEMENTARY SCHOOL TEACHERS IN ONTARIO: STOCK OF TEACHERS BY SEX AND AGE,
1972-78

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YEAR	SEX	AGE IN YEARS														TOTAL		
		19 & UNDER		20-29		30-39		40-49		50-59		60-65		66+		NOT REPORTED		
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.
1972-73	MALE	16	0.09	8,993	50.20	6,014	33.58	1,887	10.54	812	4.53	166	0.93	1	0.01	21	0.12	17,910
	FEMALE	242	0.57	24,436	57.09	8,409	19.64	4,929	11.51	3,747	8.75	976	2.28	10	0.02	60	0.14	42,809
	TOTAL	258	0.42	33,429	55.06	14,423	23.75	6,816	11.23	4,559	7.51	1,142	1.88	11	0.02	81	0.13	60,719
1973-74	MALE	10	0.05	8,505	46.45	6,731	36.76	2,128	11.62	765	4.18	135	0.74	2	0.01	35	0.19	18,311
	FEMALE	107	0.26	22,542	54.47	9,062	21.89	5,142	12.42	3,505	8.47	879	2.12	5	0.01	148	0.36	41,390
	TOTAL	117	0.20	31,047	52.00	15,793	26.45	7,270	12.18	4,270	7.15	1,014	1.70	7	0.01	183	0.31	59,701
1974-75	MALE	14	0.07	9,067	48.43	6,684	35.70	2,139	11.42	703	3.75	84	0.45	0	-	34	0.18	18,725
	FEMALE	168	0.41	22,276	54.38	9,395	22.93	5,199	12.69	3,206	7.83	610	1.49	6	0.01	108	0.26	49,968
	TOTAL	182	0.30	31,343	52.51	16,079	26.94	7,338	12.29	3,909	6.55	694	1.16	6	0.01	142	0.24	59,693
1975-76	MALE	33	0.17	9,982	50.50	6,660	33.70	2,156	10.91	669	3.39	74	0.37	0	-	189	0.96	19,763
	FEMALE	423	1.02	22,913	55.34	9,363	22.61	5,170	12.49	2,986	7.21	452	1.09	1	-	101	0.24	41,409
	TOTAL	456	0.75	32,895	53.78	16,023	26.19	7,326	11.98	3,655	5.97	526	0.86	1	-	290	0.47	61,172
1976-77	MALE	3	0.01	7,413	36.74	8,681	43.01	2,912	14.43	913	4.52	139	0.69	2	0.01	120	0.59	20,183
	FEMALE	30	0.07	18,887	46.08	11,629	28.38	6,086	14.85	3,282	8.01	905	2.21	11	0.03	151	0.37	40,981
	TOTAL	33	0.05	26,300	43.00	20,310	33.21	8,998	14.71	4,195	6.86	1,044	1.71	13	0.02	271	0.44	61,164
1977-78	MALE	4	0.02	6,094	30.08	9,530	47.03	3,192	15.76	974	4.81	127	0.63	2	0.01	337	1.66	20,260
	FEMALE	25	0.06	16,250	40.80	12,824	32.20	6,339	15.91	3,298	8.28	817	2.05	6	0.02	271	0.68	39,830
	TOTAL	29	0.05	22,344	37.18	22,354	37.21	9,531	15.86	4,272	7.11	944	1.57	8	0.01	608	1.01	60,090

Source: Elementary Teacher Information Files, Ministry of Education.

TABLE 8.16
ELEMENTARY SCHOOL TEACHERS IN ONTARIO: STOCK OF TEACHERS BY SEX & EXPERIENCE,
1972-78

YEAR	SEX	EXPERIENCE (YEARS)														TOTAL	
		BEGINNERS		1-10		11-20		21-30		31-40		41-50		50+		NOT REPORTED	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1972-73	MALE	1,624	9.07	10,778	60.18	4,051	22.60	1,077	6.01	349	1.95	31	0.17	-	-	-	-
	FEMALE	3,254	7.60	27,777	64.89	7,731	18.06	2,957	6.91	998	2.33	91	0.21	-	1	0	0
	TOTAL	4,878	8.03	38,555	63.50	11,782	19.40	4,034	6.64	1,347	2.22	122	0.20	-	1	0	0
1973-74	MALE	870	4.75	10,854	59.28	4,952	27.04	1,288	7.03	323	1.76	24	0.13	-	-	-	-
	FEMALE	1,963	4.74	26,338	63.63	8,703	21.03	3,311	8.00	999	2.41	76	0.18	-	-	-	-
	TOTAL	2,833	4.75	37,192	62.30	13,655	22.87	4,599	7.70	1,322	2.21	100	0.17	-	-	-	-
1974-75	MALE	NOT AVAILABLE															
	FEMALE																
	TOTAL																
1975-76	MALE	1,628	8.24	10,518	53.22	5,708	28.88	1,602	8.11	273	1.38	34	0.17	-	-	-	-
	FEMALE	4,538	10.96	23,416	56.55	9,075	21.92	3,346	8.08	964	2.33	70	0.17	-	-	-	-
	TOTAL	6,166	10.08	33,934	55.47	14,783	24.17	4,948	8.09	1,237	2.02	104	0.17	-	-	-	-
1976-77	MALE	1,240	6.14	10,358	51.32	6,436	31.89	1,848	9.16	266	1.32	34	0.17	1	0	-	-
	FEMALE	3,207	7.83	23,028	56.19	10,086	24.61	3,615	8.82	973	2.37	72	0.18	-	-	-	-
	TOTAL	4,447	7.27	33,386	54.58	16,522	27.01	5,463	8.93	1,239	2.03	106	0.17	-	-	-	-
1977-78	MALE	713	3.52	10,573	52.21	6,677	23.96	1,996	9.85	274	1.35	22	0.11	-	-	-	-
	FEMALE	1,756	4.41	23,358	58.64	10,117	25.40	3,649	9.16	902	2.26	48	0.12	-	-	-	-
	TOTAL	2,469	4.11	33,936	56.48	16,794	27.95	5,645	9.39	1,176	1.96	70	0.12	-	-	-	-

Source: Elementary Teacher Information Files, Ministry of Education.

TABLE 8.17
ELEMENTARY SCHOOL TEACHERS IN ONTARIO: STOCK OF TEACHERS BY SEX AND QUALIFICATION,
1972-78

YEAR	SEX	ACADEMIC/PROFESSIONAL EDUCATION (YEARS BEYOND GRADE 12 OR YEAR 4)														NOT REPORTED			TOTAL		
		0		1		2		3		4		5		6		7+		NO.	%	NO.	%
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%				
1972-73	MALE	44	0.25	579	3.23	3,832	21.40	2,381	13.29	2,900	16.19	5,526	30.85	1,278	7.14	1,281	7.15	89	0.50	17,910	100.0
	FEMALE	202	0.47	3,548	8.29	19,631	45.86	6,937	16.20	4,241	9.91	5,785	13.51	1,101	2.57	1,082	2.53	282	0.66	42,809	100.0
	TOTAL	246	0.41	4,127	6.80	23,463	38.63	9,318	15.35	7,141	11.76	11,311	18.63	2,379	3.92	2,363	3.89	371	0.61	60,719	100.0
1973-74	MALE	42	0.23	337	1.84	2,329	12.72	2,396	13.09	3,276	17.89	6,347	34.66	1,929	10.53	1,628	8.89	27	0.15	18,311	100.0
	FEMALE	162	0.39	2,520	6.09	15,929	38.50	8,304	20.06	4,970	12.01	6,943	16.77	1,400	3.38	1,086	2.62	76	0.18	41,390	100.0
	TOTAL	204	0.34	2,857	4.79	18,258	30.58	10,700	17.92	8,246	13.81	13,290	22.26	2,329	5.58	2,714	4.55	103	0.17	59,701	100.0
1974-75	MALE	31	0.17	249	1.33	1,622	8.66	2,064	11.02	3,201	17.09	7,081	37.82	2,487	13.28	1,986	10.61	4	0.02	18,725	100.0
	FEMALE	130	0.32	2,255	5.50	13,265	32.38	8,265	20.17	5,515	13.46	8,503	20.76	1,812	4.42	1,207	2.95	16	0.04	40,968	100.0
	TOTAL	161	0.27	2,504	4.19	14,887	24.94	10,329	17.31	8,716	14.60	15,584	26.11	4,299	7.20	3,193	5.35	20	0.03	59,693	100.0
1975-76	MALE	30	0.15	261	1.32	1,657	8.38	2,032	10.28	3,127	15.82	6,800	34.42	2,391	12.10	1,907	9.65	1,558	7.88	19,763	100.0
	FEMALE	118	0.28	1,981	4.78	12,138	29.31	7,581	18.31	5,085	12.28	7,746	18.71	1,664	4.02	1,133	2.74	3,963	9.57	41,409	100.0
	TOTAL	148	0.24	2,242	3.67	13,795	22.55	9,613	15.71	8,212	13.42	14,546	23.78	4,055	6.63	3,040	4.97	5,521	9.03	61,172	100.0
1976-77	MALE	50	0.25	249	1.23	1,590	7.88	1,969	9.76	3,103	15.37	6,871	34.05	2,542	12.59	1,892	9.37	1,917	9.50	20,183	100.0
	FEMALE	172	0.42	1,838	4.49	11,091	27.06	6,918	16.88	4,874	11.89	7,833	19.11	1,888	4.61	1,110	2.71	5,257	12.83	40,981	100.0
	TOTAL	222	0.36	2,087	3.41	12,681	20.73	8,887	14.53	7,977	13.04	14,704	24.05	4,430	7.24	3,002	4.91	7,174	11.73	61,164	100.0
1977-78	MALE	57	0.28	318	1.57	2,053	10.13	2,114	10.43	3,181	15.70	6,441	31.80	2,358	11.64	1,601	7.90	2,137	10.55	20,260	100.0
	FEMALE	197	0.49	2,036	5.11	11,552	29.01	6,249	15.69	4,259	10.69	6,962	17.49	1,833	4.60	985	2.47	5,757	14.45	39,830	100.0
	TOTAL	254	0.42	2,354	3.92	13,605	22.64	8,363	13.92	7,440	12.38	13,403	22.31	4,191	6.97	2,586	4.30	7,894	13.14	60,090	100.0

Source: Elementary Teacher Information Files, Ministry of Education.

TABLE 8.18
ELEMENTARY SCHOOL TEACHERS IN ONTARIO: STOCK OF TEACHERS BY SEX & SALARY
1972-78

YEAR	SEX	5,999 OR LESS		6,000-7,999		8,000-9,999		10,000-11,999		12,000-13,999		14,000-15,999		16,000-17,999		18,000-19,999		20,000-21,999		22,000-23,999		24,000+		NOT REPORTED		TOTAL	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1972-73	MALE	361	2.02	3,912	21.84	4,037	22.54	2,662	14.86	2,085	11.64	1,375	7.68	1,284	7.17	986	5.56	744	4.15	93	0.52	5	0.03	356	1.99	17,910	100.0
	FEMALE	1,574	3.68	16,426	38.37	14,756	34.47	5,413	12.64	2,437	5.69	602	1.41	312	0.73	110	0.26	49	0.11	3	0.01	0	--	1,127	2.63	42,809	100.0
	TOTAL	1,935	3.19	20,338	33.49	18,793	30.94	8,075	13.30	4,522	7.45	1,977	3.26	1,596	2.63	1,106	1.82	793	1.31	96	0.16	5	0.01	1,483	2.44	60,719	100.0
1973-74	MALE	31	0.17	2,118	11.73	4,063	22.19	2,851	15.57	2,168	11.84	1,674	9.14	1,368	7.47	1,253	6.84	747	4.08	557	3.04	23	0.13	1,428	7.80	18,311	100.0
	FEMALE	294	0.71	9,128	22.05	14,700	35.51	8,247	19.93	3,210	7.76	1,401	3.38	541	1.31	206	0.50	75	0.18	27	0.07	0	--	3,561	8.60	41,390	100.0
	TOTAL	325	0.54	11,276	18.89	18,763	31.42	11,098	18.59	5,378	9.01	3,075	5.15	1,909	3.20	1,459	2.44	822	1.38	584	0.98	23	0.04	4,989	8.36	59,701	100.0
1974-75	MALE	8	0.04	446	2.38	2,910	15.54	3,234	17.27	2,614	13.96	2,059	11.00	1,562	8.34	1,275	6.81	1,153	6.16	872	4.66	745	3.98	1,847	9.86	18,775	100.0
	FEMALE	110	0.27	2,494	6.09	11,470	28.00	11,744	28.66	6,258	15.23	2,613	6.38	1,196	2.92	604	1.47	273	0.67	104	0.25	46	0.11	4,056	9.90	40,968	100.0
	TOTAL	118	0.20	2,940	4.83	14,380	24.08	14,978	25.18	8,872	14.86	4,672	7.83	2,758	4.62	1,879	3.15	1,426	2.39	976	1.64	791	1.33	5,903	9.89	59,693	100.0
1975-76	MALE	389	1.97	478	2.42	2,303	11.64	3,498	17.70	3,265	16.52	2,474	12.52	2,009	10.17	1,490	7.54	1,198	6.06	944	4.78	1,512	7.65	203	1.03	19,763	100.0
	FEMALE	1,438	3.47	2,143	5.18	8,810	21.25	12,213	29.49	8,881	21.45	3,926	9.48	1,883	4.55	999	2.41	461	1.11	168	0.41	98	0.24	398	0.96	41,409	100.0
	TOTAL	1,827	2.99	2,621	4.28	11,104	18.15	15,711	25.69	12,146	19.86	6,400	10.46	3,892	6.36	2,489	4.07	1,659	2.71	1,112	1.82	1,610	2.63	601	0.98	61,172	100.0
1976-77	MALE	162	0.80	58	0.29	177	0.88	1,410	6.99	2,868	14.21	3,161	15.65	2,716	13.46	2,213	10.96	1,854	9.19	1,453	7.22	3,925	19.45	181	0.90	20,183	100.0
	FEMALE	385	0.94	171	0.42	878	2.14	6,066	14.80	11,147	27.20	10,070	24.57	5,397	13.17	3,012	7.35	1,788	4.36	937	2.29	754	1.84	376	0.92	40,981	100.0
	TOTAL	547	0.89	229	0.37	1,055	1.72	7,476	12.22	14,015	22.92	13,231	21.64	8,113	13.27	5,225	8.54	3,642	5.95	2,395	3.97	4,679	7.65	557	0.91	61,164	100.0
1977-78	MALE	161	0.79	30	0.15	72	0.36	272	1.34	1,579	7.75	2,555	12.61	2,763	13.64	2,761	13.63	2,464	12.16	1,852	9.14	5,644	27.86	116	0.57	20,260	100.0
	FEMALE	406	1.02	137	0.34	218	0.55	1,530	3.84	6,690	16.80	10,366	26.03	8,121	20.39	5,167	12.97	3,257	8.18	1,688	4.24	1,978	4.97	272	0.68	39,830	100.0
	TOTAL	567	0.94	167	0.28	290	0.48	1,802	3.90	8,269	13.75	12,921	21.50	10,884	18.11	7,928	13.19	5,721	9.52	3,540	5.89	7,622	12.68	388	0.65	60,090	100.0

SOURCE: ELEMENTARY TEACHER INFORMATION FILES, MINISTRY OF EDUCATION.

TABLE 8.19
ELEMENTARY SCHOOL TEACHERS IN ONTARIO
ACTUAL AND PROJECTED DEMAND AND SUPPLY, 1962-2001

YEAR	D E M A N D						S U P P L Y					
	PUPILS	STOCK OF TEACHERS	EXPANSION OR CONTRACTION	REPLACEMENT DEMAND		TOTAL DEMAND	RE-ENTRIES TO PROFESSION		FROM COLLEGES & UNIVERSITIES		SUPPLIES FROM OTHER SOURCES	
	NO.	NO.	NO.	NO.	% ⁽¹⁾	NO.	NO.	% ⁽²⁾	NO.	% ⁽³⁾	NO.	NO.
A C T U A L	1962	1,197,029	39,249	+1,170	5,118	13.44	6,288	1,314	20.90	4,191	66.65	4,974
	1963	1,233,164	40,875	+1,626	5,081	12.95	6,707	1,895	28.25	3,752	55.94	4,812
	1964	1,278,473	42,750	+1,875	5,349	13.09	7,224	2,033	28.14	4,018	55.62	5,191
	1965	1,320,043	44,967	+2,217	5,703	13.34	7,920	1,989	25.11	4,438	56.04	5,931
	1966	1,364,871	47,647	+2,680	6,642	14.77	9,322	2,162	23.19	4,883	52.38	7,160
	1967	1,405,052	51,018	+3,371	7,043	14.78	10,414	2,292	22.00	5,195	49.9	8,122
	1968	1,430,590	54,587	+3,569	7,476	14.65	11,045	2,620	23.72	5,544	50.2	8,425
	1969	1,456,117	57,587	+3,000	8,297	15.19	11,297	2,317	20.51	6,673	59.1	8,980
	1970	1,465,488	59,307	+1,720	8,226	14.28	9,946	2,325	23.38	5,388	54.2	7,621
	1971	1,456,840	58,329	- 978	7,813	13.17	6,835	1,876	27.45	3,616	52.9	4,959
	1972	1,445,101	57,991	- 338	7,417	12.72	7,079	2,176	30.74	3,306	46.7	4,903
	1973	1,422,885	56,630	-1,361	7,569	13.05	6,208	1,213	19.54	2,622	42.2	4,995
	1974	1,404,839	56,678	+ 48	7,375	13.02	7,423	1,742	23.47	2,696	36.4	5,681
	1975	1,389,478	58,167	+1,489	7,141	12.60	8,630	2,075	24.04	3,197	37.0	6,555
	1976	1,360,085	57,807	- 360	6,697	11.51	6,337	1,391	21.95	2,753	43.4	4,946
	1977	1,329,396	56,772	-1,035	5,853	10.13	4,818	1,083	22.48	1,721	35.7	2,014
P R O J E C T E D	1978	1,294,151	55,543	-1,229	5,677	10.00	4,448	934	21.00	1,779	40.0	1,735
	1979	1,267,806	54,647	- 896	5,277	9.50	4,381	898	20.50	1,752	40.0	1,731
	1980	1,251,919	53,962	- 685	4,918	9.00	4,233	847	20.00	1,693	40.0	1,693
	1981	1,241,861	53,528	- 434	4,587	8.50	4,153	831	20.00	1,661	40.0	1,661
	1982	1,234,047	53,192	- 336	4,282	8.00	3,946	789	20.00	1,578	40.0	1,579
	1983	1,225,837	52,838	- 354	3,989	7.50	3,635	727	20.00	1,454	40.0	1,454
	1984	1,216,051	52,416	- 422	3,699	7.00	3,277	655	20.00	1,311	40.0	1,311
	1985	1,210,061	52,158	- 258	3,407	6.50	3,149	630	20.00	1,260	40.0	1,269
	1986	1,209,447	52,131	- 27	3,129	6.00	3,102	620	20.00	1,241	40.0	1,241
	1987	1,211,181	52,206	+ 75	2,867	5.50	2,942	588	20.00	1,177	40.0	1,177
	1988	1,213,922	52,324	+ 118	2,610	5.00	2,728	546	20.00	1,091	40.0	1,091
	1989	1,215,820	52,406	+ 82	2,616	5.00	2,698	540	20.00	1,079	40.0	1,079
	1990	1,220,866	52,623	+ 217	2,620	5.00	2,837	567	20.00	1,135	40.0	1,135
	1991	1,225,441	52,821	+ 198	2,631	5.00	2,829	566	20.00	1,132	40.0	1,131
	1992	1,230,046	53,019	+ 198	2,641	5.00	2,839	568	20.00	1,136	40.0	1,135
	1993	1,233,686	53,176	+ 157	2,651	5.00	2,808	562	20.00	1,123	40.0	1,123
	1994	1,236,390	53,293	+ 117	2,659	5.00	2,776	555	20.00	1,110	40.0	1,111
	1995	1,237,966	53,361	+ 68	2,665	5.00	2,733	547	20.00	1,093	40.0	1,093
	1996	1,238,058	53,365	+ 4	2,668	5.00	2,672	534	20.00	1,069	40.0	1,069
	1997	1,236,415	53,294	- 71	2,668	5.00	2,597	519	20.00	1,039	40.0	1,039
	1998	1,232,902	53,142	- 152	2,665	5.00	2,513	503	20.00	1,005	40.0	1,005
	1999	1,227,683	52,917	- 225	2,657	5.00	2,432	486	20.00	973	40.0	973
	2000	1,220,794	52,620	- 297	2,646	5.00	2,349	470	20.00	940	40.0	939
	2001	1,212,548	52,265	- 355	2,631	5.00	2,276	455	20.00	910	40.0	911

(1) Percentage of previous year

(2) Percentage of total demand

(3) Percentage of total demand

Source: Elementary Teacher Information Files, Ministry of Education.

TABLE 8.20

SECONDARY SCHOOL TEACHERS IN ONTARIO
ACTUAL AND PROJECTED DEMAND AND SUPPLY, 1962-2001

YEAR		D E M A N D						S U P P L Y					
		PUPILS	TEACHERS STOCK	EXPANSION OR CONTRACTION	REPLACEMENT		TOTAL	RE-ENTRIES			NEW HIRINGS	FROM COLLEGES	OTHER
		NO.	NO.*	NO.	NO.	%(1)	NO.	NO.	%(2)	%(3)	NO.	NO.	NO.
A C T U A L	1962	331,578	14,923	2,073	1,118	8.70	3,191	332	2.22	10.40	2,859	1,826	1,033
	1963	364,210	17,170	2,247	1,493	10.00	3,740	354	2.06	9.47	3,386	2,273	1,113
	1964	395,301	19,205	2,035	1,644	9.57	3,679	376	1.96	10.22	3,303	2,288	1,015
	1965	418,730	21,659	2,454	2,050	10.67	4,504	417	1.93	9.26	4,087	2,638	1,449
	1966	436,026	24,242	2,583	2,453	11.33	5,036	442	1.82	8.78	4,594	2,696	1,898
	1967	463,736	27,164	2,922	2,948	12.16	5,870	571	2.10	9.73	5,299	3,351	1,948
	1968	500,807	30,203	3,039	3,101	11.42	6,140	728	2.41	11.86	5,412	3,833	1,579
	1969	530,679	32,342	2,139	3,480	11.52	5,619	757	2.34	13.47	4,862	2,455	2,407
	1970	556,913	33,693	1,351	3,754	11.61	5,105	862	2.56	16.89	4,243	2,528	1,715
	1971	574,520	34,469	776	3,438	10.20	4,214	847	2.46	20.10	3,367	2,388	979
	1972	583,013	34,549	80	3,273	9.50	3,353	654	1.89	19.50	2,699	1,838	861
	1973	585,725	33,889	- 660	2,960	8.57	2,300	341	1.01	14.83	1,959	1,263	696
	1974	589,650	34,231	+ 342	2,781	8.21	3,123	493	1.44	15.79	2,630	1,551	1,079
	1975	605,160	34,826	595	2,555	7.46	3,150	537	1.54	17.05	2,613	1,474	1,139
	1976	613,055	35,352	526	2,325	6.68	2,851	434	1.23	15.22	2,417	1,435	982
	1977	613,830	35,454	+ 102	2,162	6.12	2,264	372	1.05	16.43	1,892	1,038	854
P R O J E C T E D	1978	613,274	35,449	- 5	2,127	6.0	2,122	318	0.90	15.0	1,804	1,082	722
	1979	603,415	34,879	- 570	1,918	5.5	1,348	202	0.58	15.0	1,146	687	459
	1980	583,206	33,711	-1,168	1,686	5.0	518	78	0.23	15.0	440	264	176
	1981	557,412	32,220	-1,491	1,611	5.0	120	18	0.06	15.0	102	61	41
	1982	531,581	30,727	-1,493	1,536	5.0	43	6	0.02	15.0	37	22	15
	1983	514,224	29,724	-1,003	1,486	5.0	483	72	0.24	15.0	411	246	165
	1984	508,522	29,394	- 330	1,500	5.1	1,170	176	0.60	15.0	994	597	397
	1985	505,703	29,231	- 163	1,500	5.1	1,337	201	0.69	15.0	1,136	682	454
	1986	500,072	28,906	- 325	1,500	5.1	1,175	176	0.61	15.0	999	599	400
	1987	493,220	28,510	- 396	1,550	5.4	1,154	173	0.61	15.0	981	589	392
	1988	485,420	28,059	- 451	1,600	5.6	1,149	172	0.61	15.0	977	586	391
	1989	479,667	27,726	- 333	1,625	5.8	1,292	194	0.70	15.0	1,098	659	439
	1990	473,863	27,391	- 335	1,650	6.0	1,315	197	0.72	15.0	1,118	671	447
	1991	471,670	27,264	- 127	1,675	6.1	1,548	232	0.85	15.0	1,316	789	527
	1992	470,596	27,202	- 62	1,700	6.2	1,638	246	0.90	15.0	1,392	835	557
	1993	470,431	27,193	- 9	1,750	6.4	1,741	261	0.96	15.0	1,480	888	592
	1994	471,531	27,256	+ 63	1,800	6.6	1,863	279	1.02	15.0	1,584	950	634
	1995	474,100	27,405	+ 149	1,950	7.2	2,099	315	1.15	15.0	1,784	1,070	714
	1996	476,696	27,555	+ 150	2,100	7.7	2,250	338	1.23	15.0	1,912	1,147	765
	1997	479,037	27,690	+ 135	2,150	7.8	2,285	343	1.24	15.0	1,942	1,165	777
	1998	481,161	27,813	+ 123	2,250	8.1	2,373	356	1.28	15.0	2,017	1,210	807
	1999	482,948	27,916	+ 103	2,450	8.8	2,553	383	1.37	15.0	2,170	1,302	868
	2000	484,389	27,999	+ 83	2,700	9.7	2,783	417	1.49	15.0	2,366	1,419	947
	2001	485,500	28,064	+ 65	3,000	10.7	3,065	460	1.64	15.0	2,605	1,563	1,042

* Projected number of teachers calculated by using a PTR value of 17.3 to the number of students taken from Chapter 3, Table 3.4.

(1) Percentage of previous year

(2) Percentage of teacher stock

(3) Percentage of total demand

Source: Elementary Teacher Information Files, Ministry of Education.

Quite clearly, as shown in the table inserted above (p. 210), the total number of public school teachers has not been drastically decreased since 1973 and 1974, and the total pupil-teacher ratio has, as a consequence, dropped almost every year. As indicated earlier, the official data on the number of regular classroom teachers is rather inadequate, but the indications are that the reductions in the ratio have been much smaller and that only since 1975 has it dropped consistently. In any case, it is clear that the ratios have been decreased in an attempt to keep jobs for the teachers, but we don't know whether this was an overall decrease or a genuine attempt to reduce the number of very large classes. To effect real improvements in the quality of education we must get rid of very large classes, not alter by only one pupil or two classes which are already relatively small.

Finally, in Table 8.21 I have shown for the secondary school teachers of the province in 1977-78 not only the number of persons teaching each of the major subjects (including as a final entry the row No Special Subject), but their qualifications to teach each of the subjects as main subjects and as second subjects. The analysis given in this table is not as complete as that in the study I personally did in Nova Scotia¹, in that the actual qualifications of those teaching a subject, although not qualified to do so, are not shown. But all these data are available and have been reported in Statistical Appendix #6 in even greater detail than in the Nova Scotia study. These data can be used, of course, to determine the needs for in-service training, upgrading and updating of the teachers. Similar tables should be prepared each year and supplied to the school boards.

In the future in secondary schools, attrition and non-renewal of probationary and temporary certificates will be sufficient to weather the storm of declining enrolment for some boards, but others will have to fire competent and experienced teachers from the permanent staff. What this means, as we saw from the teacher computer wage model in the Second Interim Report, is higher salaries paid automatically as experience and qualifications increase, and consequently a higher wage

¹Who Teaches What in the High Schools in Nova Scotia? R.W.B. Jackson, 1977.

TABLE 8.21

SECONDARY SCHOOL TEACHERS IN ONTARIO: THEIR QUALIFICATIONS
BY SUBJECT AND WHAT THEY ARE TEACHING, 1977-78

SUBJECT TAUGHT	NUMBER TEACHING AS A MAIN SUBJECT	TEACHING AS MAIN SUBJECT				NUMBER TEACHING AS A SECOND SUBJECT	TEACHING AS SECOND SUBJECT			
		QUALIFIED TO TEACH		NOT QUALIFIED TO TEACH			QUALIFIED TO TEACH		NOT QUALIFIED TO TEACH	
		NO.	%	NO.	%		NO.	%	NO.	%
ENGLISH	3,731	3,381	90.6	350	9.4	779	453	58.2	326	41.8
FRENCH	1,389	1,305	94.0	84	6.0	275	222	80.7	53	19.3
FRANCAIS	47	20	42.0	27	57.4	17	3	17.6	14	82.4
LATIN	148	144	97.3	4	2.7	62	50	80.6	12	19.4
GREEK	2	0	0	2	100	11	3	27.3	8	72.7
GERMAN	106	75	70.8	31	29.2	183	90	49.2	93	50.8
RUSSIAN	4	3	75.0	1	25.0	3	1	33.3	2	66.7
SPANISH	45	38	84.4	7	15.6	120	93	77.5	27	22.5
HISTORY	2,012	1,877	93.3	135	6.7	476	299	62.8	177	37.2
GEOGRAPHY	1,651	1,584	95.9	67	4.1	362	197	54.4	165	45.6
LIBRARY	372	116	31.2	256	68.8	145	39	26.9	106	73.1
MUSIC	455	399	87.7	56	12.3	36	14	38.9	22	61.1
SOCIAL STUDY	82	14	17.1	68	82.9	86	20	23.3	66	76.7
MATHMATICS	3,285	2,903	88.4	382	11.6	723	248	34.3	475	65.7
SCIENCE	1,872	1,144	61.1	728	38.9	929	487	52.4	442	47.6
PHYSICS	451	273	60.5	178	39.5	270	114	42.2	156	57.8
CHEMISTRY	463	349	75.4	114	24.6	275	162	58.9	113	41.1
ZOOLOGY	324	270	83.3	54	16.7	299	214	71.6	85	28.4
BOTANY	2	0	0	2	100	13	0	0	13	100
HOME ECONOMIC	788	682	86.5	106	13.5	82	12	14.6	70	85.4
COUNSELLING	498	0	0	498	100	391	0	0	391	100
GROUP GUIDANCE	269	82	30.5	187	69.5	162	38	23.5	124	76.5
P.H.E.	2,482	2,395	96.5	87	3.5	380	313	82.4	67	17.6
ACCOUNTING	171	18	10.5	153	89.5	97	6	6.2	91	93.8
BOOKKEEPING	121	17	14.0	104	86.0	40	6	15.0	34	85.0
OFFICE PRACTICE	86	48	55.8	38	44.2	116	81	69.8	35	30.2
SHORTHAND	130	71	54.6	59	45.4	143	64	44.8	79	55.2
TYPING	472	242	51.3	230	48.7	297	106	35.7	191	64.3
AUTO MECHANIC	561	517	92.2	44	7.8	83	25	30.1	58	69.9
AIR CONDITIONING	14	10	71.4	4	28.6	4	2	50.0	2	50.0
DRAFTING	607	567	93.4	40	6.6	108	23	21.3	85	78.7
WOOD WORK	290	258	89.0	32	11.0	68	23	33.8	45	66.2
MACHINE SHOP	429	415	96.7	14	3.3	46	24	52.2	22	47.8
ELECTRICAL	542	523	96.5	19	3.5	54	23	42.6	31	57.4
OTHER	351	58	16.5	293	83.5	465	47	10.1	418	89.9
OCCUPATION PRACTICE	655	0	0	655	100	116	0	0	116	100
OCCUPATION GENERAL	133	0	0	133	100	27	0	0	27	100
INDUSTRIAL ARTS	64	22	34.4	42	65.6	23	4	17.4	19	82.6
FINE ARTS	733	587	80.1	146	19.9	197	90	45.7	107	54.3
MISC. COMMUNICATION	1,543	1,401	90.8	142	9.2	544	386	71.0	158	29.0
MISC. TECHNOLOGY	533	138	25.9	395	74.1	249	23	9.2	226	90.8
SHEET METAL	78	71	91.0	7	9.0	21	9	42.9	12	57.1
NO SPECIAL SUBJECT	835					20,049				

Source: Teacher Information Files, Ministry of Education, and annual computer files maintained by OSSTF.

bill overall for practically all school boards as the years go by and the staff ages. I know of no way to halt this trend and the increase in the wage bill unless either large numbers of the older staff are fired or retired and young teachers hired at lower salaries, or a general decrease is made in all wages and salaries, neither of which is very likely to happen, or the size of the staff is reduced. School boards, whether they like it or not, will be faced with automatically increasing wage bills annually unless they decrease the size of staff. This is one of the more expensive implications of declining school enrolments; a simple corollary of an aging staff.

By far the most important factors affecting salaries will have nothing to do with declining enrolments. They will be inflation and the inevitable necessity (as we now see it) for teachers salaries to at least keep pace with inflation, especially these days when the rate is rapidly approaching the two digit range again. I am aware of real or apparent reductions in expenditures on certain programs in the federal and provincial governments, and I note that municipalities (but not school boards yet) in this province have apparently accepted a 6% expenditure increase as the ceiling for next year. But no government is searching for means to increase revenues. I am puzzled by the continued reliance at all levels on deficit financing, i.e., on borrowing money to pay even operating expenses, as though public debt was of little consequence. Yet even a casual reading of budget statements reveals the heavy load the taxpayers are already carrying in debt charges alone, and with no attempt in sight to repay the capital debt. Perhaps it will be argued that this has no direct bearing on or implications from declining enrolments, but I don't see it that way. At a 10% inflation level not only the wage bill, but total expenditures on schools, will double every 7 years. For example, if only inflation of 10% is counted, i.e., with no allowances granted for more experience and higher qualifications, the average elementary school teacher's salary would be \$62,200 and the average secondary school teacher's salary \$78,700 by 1990. Declining enrolments are not to blame for this, and indeed they may even help the schools to weather the economic storms. We must not assign responsibility for these pure inflation problems, or for their

solution, to declining enrolments. I stress this point only to make it crystal clear where the fault lies, and it is not with the schools.

There are very definite implications of declining enrolments for probationary, temporary, term and permanent appointments. Part-time and full-time appointments must also be considered since prevailing conditions make some flexibility necessary. It is obvious that during the next 10 to 15 years many boards, especially those in the larger cities and suburbs, will need to avail themselves of a rather wide use of relatively short-term contracts with regular classroom teachers and with practically all other categories of staff, at least to the fullest extent possible under existing or negotiated collective agreements. Unfortunately some boards may need to move a number of staff members now on permanent contracts down to and through the short-term contract to dismissal. There are various possibilities of building a high degree of flexibility into staffing practices without necessarily greatly reducing or destroying job security -- but it would be "job security" of a slightly different nature, in the sense of some position on a staff being available. This should not be confused with the concept, especially for supervisory officers, consultants and coordinators as well as administrators, of limited term appointments to a specific position, as recommended later.

Short-term appointments combined with the term validity of the teaching certificates should lead teachers and boards to reconsider the meaning and usefulness of a "permanent" appointment and to question the validity of life-long job security. Even in the civil service, I find to my surprise, and in the universities with their rigid systems of tenure and academic freedom, it is possible to terminate for "cause" (which includes budgetary cutbacks or a period of financial constraints, in most cases) any so-called "permanent" appointment or contract. It is not often done, but it can be, and under present economic conditions is being resorted to far more frequently than ever before during the lifetime of most employees. The term "permanent" appointment has obviously misled many employees. While I can see no reason to object to the use

of term appointments, long or short, I do feel that the concept of "continuing"¹ employment should be retained. Therefore, I recommend:

The concept of continuing employment be instituted for full-time and part-time appointments.

This might be a common feature of the employment pattern of the future. It will be the pattern in education certainly, but also in practically all fields of endeavour as we move into the new era of greater leisure, or perhaps one should say of shorter hours of formal employment, and of the blurring or obliteration of the lines between education and work on the one hand, and between work and leisure on the other.

We come now to a consideration of benefits, including superannuation. Their monetary cost is, and will be high, but possibly we have for far too long in this country placed monetary returns as a preferred "good" far above the avoidance or alleviation of human suffering. We have not paid sufficient attention to the possibility of making greater use of such fringe benefits in the problems arising from declining enrolments. As I commented before, I was impressed by the ingenuity shown by groups and individuals appearing before me in the way they devised methods of assisting their colleagues through such benefits, even through the use of provisions of the income tax laws and regulations. We tend to forget that many of those complicated income tax provisions were designed to assist the needy and worthy taxpayer, not solely to extract the maximum number of tax dollars from his unwilling hands. The federal and provincial governments have recently made greater use of income tax provisions to relieve or remove harsh and unjust burdens and seem now well on the way to the attainment of some workable and equitable form of a guaranteed annual wage or income.

But to get over these next 10 to 15 years we must look to each other for help, not expect government to bail us out. In fact, some government decisions and actions, especially financial, will hurt more than help. In Appendix 8.A of this chapter I have pulled together from

¹In other words, the employment continues from year to year unless specifically terminated.

briefs and other sources all the suggestions made to the Commission about how we might help each other -- and ourselves -- over these difficult years. The two concepts or ideas I would emphasize most strongly are, first, sharing the available work, and second, providing incentives for early retirement, stressing in particular those ways and means (including part-time employment and supplementary annuities purchased by the board) that will permit and encourage a large number to do what I call "slide gradually and gracefully into retirement". Therefore I recommend:

After early retirement up to 100 days teaching employment per year, instead of the present 20, be permitted without penalty to age 65.

I am confident that many more teachers will seek an easier life through part-time work, followed by early retirement combined with a limited amount of part-time work. (I would anticipate that they would form something of a permanent source of supply teachers, and excellent ones, too.)

In terms of early retirement, and the possible numbers, readers are referred to Tables 8.23A and 8.23B (for secondary schools) and also the tables on pp. 280 and 282 of my First Interim Report, which show, up to the period 2006-2010, the extraordinary difference it makes when the 90 factor is used. For elementary schools the London Board of Education is used as an example in Table 8.22B. The same is done for teachers of English as an example in secondary schools of Ontario in Table 8.23B. In all tables note the influence of the 90 factor. (Similar tables should be prepared each year and supplied to school boards.) If supplementary means such as use of the 90 factor can be implemented to make early retirement financially attractive, there seems little doubt that by 1986 probably, and by 1991 almost certainly, attrition will be sufficient to restore some semblance of balance to the employment picture. The two assessments of the Teacher's Superannuation Fund have convinced me that we can afford to dip (lightly) into reserves of the cash flow, if necessary, to help relieve the "crunch" between now and 1986. I assume, of course, that the indexing fund, now functioning separately,

TABLE 8.22A

NUMBER OF ONTARIO ELEMENTARY SCHOOL TEACHERS ELIGIBLE FOR RETIREMENT
OUT OF TOTAL TEACHING FORCE IN 1977-78, BASED ON:
(1) AGE 65 (2) AGE 65 OR 90 FACTOR WHICHEVER COMES FIRST

YEAR OF RETIREMENT	ELIGIBLE FOR RETIREMENT BASED ON AGE 65 OR 90 FACTOR WHICHEVER COMES FIRST			ELIGIBLE FOR RETIREMENT BASED ON AGE 65	
	AGE 65	90 FACTOR	CUMULATIVE %	AGE 65	CUMULATIVE %
1978	58	832	1.6	131	0.2
1979	62	270	2.1	139	1.5
1980	64	290	2.8	177	0.8
1981	69	342	3.5	190	1.1
1982	71	350	4.2	200	1.5
1983	60	417	5.0	236	2.2
1984	71	434	5.9	236	2.2
1985	75	457	6.9	284	2.7
1986	103	535	8.0	333	3.3
1987	89	585	9.1	355	3.9
1988	79	651	10.4	401	4.6
1989	93	690	11.8	453	5.4
1990	81	751	13.2	487	6.3
1991	89	910	15.0	494	7.1
1992	76	1,011	16.9	564	8.1
1993	91	1,119	19.0	590	9.1
1994	72	1,385	21.5	626	10.2
1995	85	1,556	24.4	733	11.5
1996	57	1,760	27.6	821	13.0
1997	52	1,845	30.9	799	14.4
1998	38	1,978	34.4	809	15.8
1999	38	2,107	38.2	873	17.3
2000	33	2,253	42.2	1,016	19.1
2001	17	2,573	46.7	1,126	21.0
2002	7	3,055	52.0	1,170	23.1
2003	7	3,506	58.2	1,389	25.5
2004	0	4,041	65.2	1,595	28.3
2005	0	4,227	72.6	1,725	31.3
2006	0	3,809	79.3	1,930	34.7
2007	0	3,305	85.0	2,009	38.2
2008	0	2,971	90.2	2,202	42.0
2009	0	2,577	94.7	2,120	45.7
2010	0	1,984	98.2	2,179	49.5
2011	0	895	99.8	2,932	54.7
LEFT*	0	132	100.0	25,946	100.0

* Will not be eligible for retirement by 2011.

Note: Total teachers = 57,634

Less: No birthdate available = 394

Total teachers in sample = 57,240

Source: Elementary Teacher Information Files, Ministry of Education.

TABLE 8.22B

NUMBER OF ONTARIO ELEMENTARY SCHOOL TEACHERS ELIGIBLE FOR RETIREMENT
OUT OF TOTAL TEACHING FORCE IN 1977-78
FOR THE LONDON BOARD OF EDUCATION, BASED ON:
(1) AGE 65 (2) AGE 65 OR 90 FACTOR WHICHEVER COMES FIRST

YEAR OF RETIREMENT	ELIGIBLE FOR RETIREMENT BASED ON AGE 65 OR 90 FACTOR WHICHEVER COMES FIRST			ELIGIBLE FOR RETIREMENT BASED ON AGE 65	
	AGE 65	90 FACTOR	CUMULATIVE %	AGE 65	CUMULATIVE %
1978	3	16	1.7	3	0.3
1979	3	6	2.5	4	0.6
1980	1	4	3.0	1	0.7
1981	1	8	3.8	5	1.2
1982	1	8	4.6	2	1.3
1983	3	5	5.3	3	1.6
1984	2	13	6.6	4	2.0
1985	2	8	7.5	4	2.3
1986	2	8	8.4	8	3.0
1987	1	14	9.8	8	3.8
1988	1	13	11.0	8	4.5
1989	3	29	13.9	13	5.7
1990	1	21	15.9	7	6.3
1991	3	17	17.7	8	7.0
1992	3	26	20.3	11	8.0
1993	1	22	22.3	20	9.8
1994	3	46	26.7	14	11.0
1995	0	32	29.6	15	12.4
1996	1	40	33.3	17	13.9
1997	1	38	36.8	26	16.2
1998	1	38	40.3	18	17.8
1999	0	42	44.0	20	19.6
2000	0	38	47.4	29	22.2
2001	0	56	52.5	20	24.0
2002	0	70	58.7	21	25.9
2003	0	70	65.0	23	28.0
2004	0	98	73.8	43	31.8
2005	0	67	79.8	42	35.6
2006	0	78	86.8	35	38.7
2007	0	38	90.2	42	42.5
2008	0	51	94.8	49	46.9
2009	0	30	97.5	45	50.9
2010	0	17	99.0	39	54.4
2011	0	9	99.8	64	60.2
LEFT*	0	2	100.0	444	100.0

* Will not be eligible for retirement by 2011.

Note: Total teachers = 1,117

Less: No birth date available = 2

Total teachers in sample = 1,115

Source: Elementary Teacher Information Files, Ministry of Education.

TABLE 8.23A

NUMBER OF ONTARIO SECONDARY SCHOOL TEACHERS ELIGIBLE FOR RETIREMENT
OUT OF TOTAL TEACHING FORCE IN 1977-78, BASED ON:

(1) AGE 65 (2) AGE 65 OR 90 FACTOR WHICHEVER COMES FIRST

YEAR OF RETIREMENT	ELIGIBLE FOR RETIREMENT BASED ON AGE 65 OR 90 FACTOR WHICHEVER COMES FIRST			ELIGIBLE FOR RETIREMENT BASED ON AGE 65	
	AGE 65	90 FACTOR	CUMULATIVE %	AGE 65	CUMULATIVE %
1978	65	264	1.0	83	0.3
1979	84	94	1.6	107	0.6
1980	117	123	2.3	154	1.1
1981	113	137	3.1	156	1.5
1982	135	168	4.0	193	2.1
1983	148	190	5.0	219	2.8
1984	171	217	6.2	255	3.6
1985	221	250	7.7	323	4.6
1986	248	310	9.4	407	5.8
1987	261	314	11.2	443	7.2
1988	247	452	13.3	471	8.7
1989	242	504	15.6	488	10.2
1990	222	584	18.1	556	11.9
1991	215	671	20.8	544	13.5
1992	190	774	23.8	562	15.3
1993	205	1,000	27.5	637	17.2
1994	131	1,052	31.2	645	19.2
1995	114	1,270	35.4	777	21.6
1996	96	1,372	39.9	793	24.1
1997	74	1,316	44.5	791	26.5
1998	56	1,622	49.7	816	29.0
1999	41	1,718	55.1	791	31.4
2000	22	1,862	60.9	887	34.2
2001	82	1,959	67.0	1,089	37.5
2002	13	1,931	73.0	1,049	40.8
2003	4	1,687	78.2	1,149	44.3
2004	0	1,749	83.6	1,219	48.1
2005	0	1,492	88.2	1,334	52.2
2006	0	1,136	91.7	1,394	56.5
2007	0	959	94.7	1,497	61.1
2008	0	755	97.0	1,613	66.0
2009	0	565	98.7	1,607	71.0
2010	0	319	99.7	1,497	75.6
2011	0	84	99.9	1,665	80.7
LEFT*	0	6	100.0	6,262	100.0

* Will not be eligible for retirement by 2011.

Note: Total teachers = 36,666

Less: No birth date available = 4,193

Total teachers in sample = 32,473

Source: Annual Computer Files maintained by OSSTF.

TABLE 8.23B

NUMBER OF ONTARIO SECONDARY SCHOOL ENGLISH TEACHERS ELIGIBLE FOR
RETIREMENT OUT OF TOTAL TEACHING FORCE IN 1977-78, BASED ON:
(1) AGE 65 (2) AGE 65 OR 90 FACTOR WHICHEVER COMES FIRST

YEAR OF RETIREMENT	ELIGIBLE FOR RETIREMENT BASED ON AGE 65 OR 90 FACTOR WHICHEVER COMES FIRST			ELIGIBLE FOR RETIREMENT BASED ON AGE 65	
	AGE 65	90 FACTOR	CUMULATIVE %	AGE 65	CUMULATIVE %
1978	13	18	0.8	14	0.3
1979	8	12	1.2	10	0.6
1980	11	11	1.8	12	0.9
1981	13	11	2.4	18	1.3
1982	15	12	3.0	19	1.8
1983	18	17	3.9	24	2.4
1984	16	20	4.7	22	2.9
1985	16	25	5.7	28	3.6
1986	30	29	7.2	46	4.7
1987	22	18	8.2	39	5.6
1988	25	46	9.9	49	6.8
1989	27	48	11.7	51	8.1
1990	19	50	13.4	48	9.2
1991	20	50	15.1	46	10.4
1992	20	65	17.2	51	11.6
1993	23	79	19.6	54	12.9
1994	10	96	22.2	52	14.2
1995	20	116	25.5	77	16.1
1996	14	138	29.2	93	18.3
1997	12	160	33.4	67	20.0
1998	7	195	38.3	63	21.5
1999	5	222	43.8	82	23.5
2000	5	273	50.6	74	25.3
2001	6	298	58.0	112	28.0
2002	6	317	65.9	113	30.8
2003	0	279	72.7	128	33.9
2004	0	284	79.6	110	36.5
2005	0	238	85.4	194	41.3
2006	0	175	89.6	183	45.7
2007	0	160	93.5	209	50.8
2008	0	131	96.7	233	56.5
2009	0	84	98.7	257	62.7
2010	0	39	99.7	257	69.0
2011	0	12	99.9	266	75.5
LEFT*	0	1	100.0	1,009	100.0

* Will not be eligible for retirement by 2011.

Note: Total teachers = 4,767
Less: No birth date available = 657
Total teachers in sample = 4,110

Source: Annual computer files maintained by OSSTF.

will continue to do so; otherwise, if it were to be incorporated into the main fund, I would have grave doubts about the actuarial soundness of the combined plan unless contributions were increased very substantially. I am aware, of course, of the evaluations underway of all pension funds, public and private, and that the indexing feature of the public funds may have to be abandoned (unless, as in the teachers' fund, it is financed independently of the main fund). One of the most effective ways (supplementary to job-sharing) in which teachers might move to help each other would be to press for a change in the Superannuation Fund regulations to permit early retirement between now and 1986 on the basis of an 85 factor plus annuities. It would be necessary to monitor the fund carefully throughout this period, with a very thorough actuarial evaluation in 1986, and, if it proves necessary, to increase contributions from time to time to ensure its continued solvency and actuarial health. Accordingly, I recommend:

The superannuation regulations be amended to permit, during the period between now and 1986, early retirement on the basis of an 85 factor.

The fund be monitored on an annual basis with a thorough evaluation in 1986, and if necessary, contributions of employers and employees be increased from time to time to keep the fund sound.

I recommend, further:

In light of the 1986 evaluation and the conditions of the economy at that time, and of its future prospects, a decision be made in 1987 whether to continue on the basis of the 85 factor or to revert to the 90 factor or to age 65, or to change to age 70.

Special attention must be paid to two points. First, early retirement must be at the discretion and sole choice of the individual. Second, means must be introduced, by annuity purchases by the board, by part-time employment and by other means such as prepayment of the corresponding superannuation contribution, in full, by the teacher, to avoid the imposition of a financial penalty on those who elect to retire early (whether wholly or partially), since many will be doing so partly at least from a sense of duty and a sincere desire to help their fellow teachers.

Although all of the ideas in Appendix 8.A are worthy of consideration, and some may prove particularly attractive to certain boards and groups of teachers, I recommend:

The teaching profession begin work together on the following:

- (a) early retirement plans;
- (b) job sharing plans, including night school and summer school jobs;
- (c) elimination of large classes;
- (d) encouragement of most kinds of part-time continuing employment;
- (e) promotion or transfers, exchanges, and leaves of absence;¹
- (f) encouragement of in-service training, including retraining for teaching, as well as for related or even unrelated jobs, in business and industry.

These are all matters open to negotiations and, as they should, might form part of any new collective agreements between boards and teachers.

Two requirements which we have carried forward from the past without much thought are causing unnecessary alarm and even hardship for many teachers. I refer to the obligation on the part of the teacher to submit his/her resignation on or before November 30 and May 31 if such is to be effective at the end of the calendar year in the first case and the end of the school year in the second. Boards no longer need any protection of this kind in a time of oversupply of teachers, and in any event only a month's notice for vacating a professional position is, on the face of it, not only inadequate but ridiculous. I know of few cases where a board has insisted upon completion of a contract when notice of intent to resign is given late or at another time, despite the legal right of a board to do so. Besides, in a teaching position, to force an incumbent teacher to go through the motions is about the biggest disservice an administration or a board could inflict on the helpless students, compelled by the compulsory attendance laws to attend those classes. I therefore recommend:

¹For more information: Industrial Inquiry Commission on Educational Leave and Productivity appointed by the federal Ministry of Labour, 150 Main Street West, Hamilton, L8T 1H8.

Present time requirements regarding notice of resignation be withdrawn, and in lieu thereof there be incorporated in the collective agreement between each board and its teaching staff a clause stipulating that notice of intent to resign be given as early as possible, preferably one year in advance of the date of severance of employment.

The obverse of this coin is more tarnished and disturbing: some boards give notice of dismissal to large numbers of "possible" surplus/redundant teachers a day or two before May 1, to take effect the following June 30.¹ The time allowed by the notice to find another job is reprehensibly short (only two months) for anyone in a professional position and there almost seems to be a game of some sort being played by some of the boards -- fire the teachers at the end of April (often from a permanent or continuing contract) and then hire them back, or most of them, within the next four months (frequently before the end of June) but on term appointments of one or at most two years. In my opinion this is unfair practice on the part of any board, and a most inhuman way to treat any loyal and competent member of staff. Any administrator worth his pay should be able to notify potential surplus/redundant employees at least one year in advance and so advise his board. Of course, he will be mistaken by a few positions each year, but what of it? He and his board should "pick up the tab" for that. Accordingly, I recommend:

Each board be required to give at least one year's (12 months) notice of dismissal on the basis of surplus/redundancy, and if the services of the employee are still required within 24 months of notice of such dismissal, he or she be reinstated with full rights, privileges and benefits previously enjoyed.

Teacher demand is, of course, determined by enrolment, and at the secondary school level the demand for teachers by subjects is determined in large part by the selection of options (within the Ministry guidelines) by the students.

The general figures for elementary and secondary schools, in terms of demand for teachers (with reference to supply) are given in

¹I noted, with pleasure, that the Toronto Board of Education did not follow this practice this year.

Tables 8.19 and 8.20. The historic data goes back to 1962 when the birth rate first fell (the first decline in enrolment did not occur until 1971 when immigration failed to make up for birth declines) and the projections extend to 2001, beginning with the actual 1977 data. We have shown enrolment, number of teachers, expansion and replacement figures for demand. Using projected withdrawal ratios based on age structure of the teaching force and past and present re-entry ratios, the supply was calculated based on existing stocks and new hirings.¹ The demand, of course, drops and, as a result, a position of oversupply exists (see Hansen FLEXOR Model, which is based on slightly different data and assumptions yet, in general, yields results which check closely with those of this section and hence confirm the general trends of an oversupply position).

Far more data are available for the secondary schools, since the projections have been done by the major subjects. Thus in Tables 8.24 to 8.32 which follow, we show, updated to include the actual 1977 figures, sets of figures from 1973 to 1987, using for supply two assumptions for new teacher graduates required (A and B parts of Tables 8.28 and 8.29). For A we assumed new teacher graduates required would equal 70% of new hirings. For B we assumed the number of new teacher graduates would reach 1,000 in 1979 and continue at that level to 1987. The tables are:

- 8.24: Historic data on secondary school enrolment, teachers and class size (calculated), by subjects and total, 1973 to 1977.
- 8.25: Projections of secondary school enrolment to 1987, by subject and totals of enrolment and calculated class size in Ontario.
- 8.26: Projected demand for secondary school teachers, by subject, including calculated new hirings in Ontario.
- 8.27A: Projected new secondary school teacher graduates, by subject, in Ontario.
- B: Projected new secondary school teacher graduates, by subject, in Ontario.

¹For data on withdrawals and acquisitions of teachers, see also Tables 11 to 14 of the Second Interim Report.

- 8.28A: Projected secondary school teacher supply, by subject, in Ontario.
- B: Projected secondary school teacher supply, by subject, in Ontario.
- 8.29A: Projected additional surplus or deficit, of Ontario secondary school teachers, by subject, based on Table 8.28A.
- B: Projected additional surplus or deficit, of Ontario secondary school teachers, by subject, based on Table 8.28B.
- 8.30: Historic and projected sources of acquisition of secondary school teachers in Ontario.
- 8.31: Historic and projected reasons for withdrawals of secondary school teachers in Ontario.

Under our assumptions and in nearly all subjects, except possibly French, Francais, other languages and home economics, the supply of teachers greatly exceeds the demand, possibly in total by some 15,000 to 31,000 teachers by 1987. Surpluses will perhaps be particularly great in English, history, sciences, physical education, commercial, vocational and what is classified as administrative. Presumably these warnings of specific surpluses, together with the general ones prepared by Hansen, will filter down through the faculties of education, the arts and science faculties and eventually to guidance counsellors. Certainly, in terms of employment opportunities under today's conditions, many of our young people have made some unfortunate selections of specialities, as well as of professions.

8.3 Administrative Staff

In all the publicity about declining school enrolments and their implications for staffing, remarkably little has been said about either the administrative staff or the support staff, although in the case of the former a number of briefs (and speakers at the public hearings) made some very pointed remarks about the number of administrators (with the implied, or even open, criticism that they not only weren't needed but were grossly overpaid). Very little attention has been given to the fact that the central office staffs have been systematically reduced in recent years, at least for those boards suffering severe declines in enrolment. There is, of course, always something of a time lag in such reductions, since reassignment or discontinuance of certain responsibilities cannot be accomplished overnight, and in many cases -- for

TABLE 8.24

HISTORIC DATA ON SECONDARY SCHOOL ENROLLMENT, AND CLASS SIZE (CALCULATED),
BY SUBJECTS AND TOTAL, 1973 TO 1977

S U B J E C T	FULL-TIME EQUIVALENT ENROLLMENT (ACTUALS)					CLASS SIZE (ACTUALS)					FULL-TIME EQUIVALENT TEACHERS (ACTUALS)				
	1973	1974	1975	1976	1977	1973	1974	1975	1976	1977	1973	1974	1975	1976	1977
ENGLISH	79,383	80,789	83,042	84,952	85,880	26.3	26.1	26.0	25.8	25.4	3,562	3,653	3,769	3,885	3,990
FRENCH	27,504	26,448	26,769	27,457	27,610	23.9	23.8	23.9	24.4	24.4	1,358	1,311	1,322	1,328	1,335
FRANCAIS	4,092	4,187	4,172	4,241	4,114	24.5	24.5	24.3	24.4	24.5	197	202	203	205	198
CLASSICS	2,321	2,124	2,026	1,996	1,699	16.6	17.0	17.3	17.9	17.2	165	147	138	132	117
OTHER LANGUAGES	4,805	4,795	4,706	4,512	4,185	19.0	18.6	18.6	18.7	18.4	298	304	299	285	268
HISTORY	34,766	36,110	36,737	36,806	38,678	26.1	26.2	26.4	26.2	26.0	1,572	1,626	1,642	1,658	1,755
SOCIAL STUDIES	14,191	16,598	17,947	18,687	18,709	26.7	27.1	27.3	27.1	26.9	627	723	776	814	821
GEOGRAPHY	39,499	38,991	40,209	40,454	39,281	26.5	26.4	26.5	26.4	25.9	1,759	1,739	1,790	1,808	1,790
MUSIC	10,666	11,281	11,678	11,561	11,360	22.4	22.3	22.1	21.4	21.5	562	597	624	637	623
MATHEMATICS	76,410	78,829	82,038	84,157	84,584	26.0	26.0	26.0	25.8	25.6	3,468	3,578	3,723	3,849	3,899
PHYSICS	10,640	10,639	11,155	11,101	10,811	26.1	26.1	26.0	25.9	25.6	481	481	506	506	498
CHEMISTRY	13,041	12,663	13,077	12,866	12,338	25.6	25.4	25.6	25.2	24.9	601	588	603	602	585
SCIENCES	48,955	49,678	51,214	51,788	52,341	26.5	26.5	26.4	26.1	26.1	2,180	2,212	2,289	2,341	2,366
HOME ECONOMICS	22,074	22,593	22,667	23,255	22,848	20.4	20.3	20.9	21.1	21.2	1,277	1,313	1,280	1,301	1,272
PHYSICAL EDUCATION	54,194	53,762	55,717	55,335	55,163	25.2	26.5	26.6	26.2	25.6	2,538	2,394	2,472	2,492	2,543
FINE ARTS	22,147	22,445	23,620	24,481	24,376	22.6	22.3	22.6	22.4	22.5	1,156	1,188	1,233	1,290	1,278
COMMERCIAL	62,021	59,895	58,185	57,593	57,576	25.4	25.2	25.2	25.1	25.2	2,881	2,805	2,725	2,708	2,696
VOCATIONAL	55,978	55,267	58,326	60,175	60,874	16.0	15.9	16.5	16.5	16.4	4,128	4,102	4,171	4,303	4,380
OTHER	3,036	2,634	1,873	1,640	1,401	20.8	19.8	23.3	21.7	21.7	172	157	95	89	76
LIBRARY & SUPERVISION	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	869	874	890	907	915
GUIDANCE & COUNSELING	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	1,449	1,456	1,483	1,512	1,525
ADMINISTRATIVE	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	3,188	3,202	3,263	3,326	3,354

TABLE 8.25
PROJECTIONS OF SECONDARY SCHOOL ENROLMENT TO 1987, BY SUBJECT AND TOTALS
OF ENROLMENT AND CALCULATED CLASS SIZE IN ONTARIO

S U B J E C T	ENROLMENT, FULL-TIME EQUIVALENT										CLASS SIZE							
	ACTUAL 1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	ACTUAL 1977	1978	1979	1980	1981	1982	1987
ENGLISH	85,880	84,980	83,884	81,161	77,433	73,907	71,496	70,682	70,304	69,519	68,563	25.4	25.7	25.6	25.6	25.7	25.6	25.6
FRENCH	27,610	27,393	27,040	26,139	24,953	23,814	23,035	22,775	22,652	22,399	22,092	24.4	24.2	24.3	24.3	24.3	24.3	24.3
FRANCAIS	4,114	4,193	4,115	3,958	3,798	3,618	3,498	3,462	3,441	3,403	3,357	24.5	24.4	24.4	24.4	24.4	24.4	24.4
CLASSICS	1,699	1,916	1,840	1,738	1,701	1,609	1,553	1,542	1,530	1,513	1,494	17.2	17.5	17.5	17.4	17.5	17.5	17.5
OTHER LANGUAGES	4,185	4,488	4,324	4,141	4,010	3,803	3,677	3,644	3,619	3,579	3,531	18.4	18.6	18.6	18.5	18.5	18.5	18.5
HISTORY	38,678	37,564	37,070	36,100	34,296	32,756	31,718	31,330	31,170	30,826	30,397	26.0	26.2	26.1	26.1	26.1	26.1	26.1
SOCIAL STUDIES	18,709	18,524	18,337	17,705	16,899	16,136	15,603	15,428	15,346	15,173	14,965	26.9	27.1	27.0	27.0	27.0	27.0	27.0
GEOGRAPHY	39,281	40,154	39,314	37,835	36,325	34,587	33,443	33,099	32,902	32,536	32,094	25.9	26.3	26.2	26.1	26.2	26.2	26.2
MUSIC	11,360	11,583	11,315	10,915	10,471	9,967	9,642	9,541	9,484	9,379	9,251	21.5	21.7	21.5	21.6	21.6	21.6	21.6
MATHEMATICS	84,584	83,944	82,859	80,092	76,463	72,972	70,583	69,788	69,411	68,636	67,694	25.6	25.8	25.7	25.7	25.7	25.7	25.7
PHYSICS	10,811	11,070	10,815	10,417	10,003	9,521	9,208	9,113	9,058	8,958	8,836	25.6	25.8	25.8	25.7	25.8	25.8	25.8
CHEMISTRY	12,338	12,817	12,468	11,987	11,541	10,972	10,610	10,506	10,440	10,324	10,185	24.9	25.2	25.1	25.1	25.1	25.1	25.1
SCIENCES	52,341	52,000	51,197	49,554	47,307	45,128	43,663	43,169	42,933	42,456	41,873	26.1	26.2	26.1	26.1	26.2	26.1	26.2
HOME ECONOMICS	22,898	23,020	22,666	21,836	20,911	19,937	19,277	19,071	18,963	18,750	18,495	21.2	21.1	21.1	21.1	21.1	21.1	21.1
PHYSICAL EDUCATION	55,163	55,644	54,481	52,661	50,411	48,023	46,464	45,960	45,695	45,189	44,571	25.6	26.1	26.0	25.9	26.0	26.0	26.0
FINE ARTS	24,376	24,260	23,976	23,134	22,103	21,096	20,399	20,172	20,063	19,838	19,567	22.5	22.5	22.5	22.5	22.5	22.5	22.5
COMMERCIAL	57,576	58,034	56,796	54,929	52,571	50,079	48,458	47,929	47,653	47,126	46,481	25.2	25.2	25.2	25.2	25.2	25.2	25.2
VOCATIONAL	60,874	60,041	59,382	57,442	54,776	52,303	50,592	50,012	49,748	49,192	48,515	16.4	16.5	16.5	16.4	16.5	16.5	16.5
OTHER	1,401	1,646	1,537	1,461	1,437	1,352	1,307	1,299	1,288	1,274	1,258	21.7	22.2	21.9	21.9	22.0	21.9	22.0
LIBRARY & SUPERVISION	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GUIDANCE & COUNSELING	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL ALL SUBJECTS	613,830	613,274	603,415	583,206	557,412	531,531	514,224	508,522	505,703	500,072	493,220	23.8	23.9	23.9	23.9	23.9	23.9	23.9

TABLE 8.26
PROJECTED DEMAND FOR SECONDARY SCHOOL TEACHERS, BY SUBJECT,
INCLUDING CALCULATED NEW HIRINGS IN ONTARIO

S U B J E C T	TEACHER REQUIREMENTS, FULL-TIME EQUIVALENT										ADDITIONAL TEACHER DEMAND (NEW HIRING), FULL-TIME EQUIVALENT											
	ACTUAL 1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	ACTUAL 1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
ENGLISH	3,990	3,897	3,860	3,742	3,561	3,402	3,292	3,253	3,237	3,200	3,156	227	63	112	27	0	0	21	85	104	84	76
FRENCH	1,335	1,334	1,311	1,268	1,212	1,155	1,118	1,105	1,099	1,087	1,072	75	66	48	27	12	9	25	45	52	45	42
FRANCAIS	198	203	199	191	183	175	169	167	166	164	162	11	23	13	10	9	8	9	12	14	13	13
CLASSICS	117	129	124	118	115	109	105	104	103	102	101	-	7	0	0	0	0	0	1	2	2	2
OTHER LANGUAGES	268	285	275	264	255	242	234	232	230	228	225	0	29	4	2	4	0	4	10	9	9	8
HISTORY	1,755	1,692	1,674	1,631	1,548	1,479	1,432	1,414	1,407	1,392	1,372	126	0	26	0	0	0	0	13	28	20	15
SOCIAL STUDIES	821	807	800	773	737	704	681	673	670	662	653	40	15	23	4	0	0	4	10	22	17	15
GEOGRAPHY	1,790	1,804	1,771	1,709	1,637	1,560	1,509	1,492	1,484	1,467	1,447	13	61	13	0	0	0	0	20	28	19	16
MUSIC	623	631	620	597	572	546	528	522	519	513	506	28	46	28	17	13	10	16	27	29	27	25
MATHEMATICS	3,899	3,839	3,799	3,676	3,504	3,346	3,237	3,200	3,183	3,147	3,104	153	63	80	0	0	0	0	63	81	62	54
PHYSICS	498	506	495	478	458	436	422	417	415	410	405	4	17	0	0	-	-	0	4	7	4	4
CHEMISTRY	585	599	586	564	542	516	499	493	491	485	478	0	29	3	0	0	-	0	7	11	7	5
SCIENCES	2,366	2,342	2,312	2,237	2,134	2,037	1,970	1,948	1,937	1,916	1,889	100	46	43	0	0	0	0	39	49	39	32
HOME ECONOMICS	1,272	1,289	1,266	1,219	1,169	1,114	1,077	1,066	1,060	1,048	1,034	57	122	84	53	52	42	54	76	80	73	70
PHYSICAL EDUCATION	2,543	2,512	2,475	2,399	2,287	2,183	2,112	2,088	2,077	2,054	2,025	131	69	60	17	0	0	13	56	67	56	49
FINE ARTS	1,278	1,272	1,259	1,214	1,160	1,107	1,071	1,059	1,053	1,041	1,027	72	71	65	34	22	20	33	54	59	53	50
COMMERCIAL	2,696	2,721	2,664	2,575	2,465	2,348	2,272	2,247	2,234	2,210	2,179	69	126	50	9	0	0	13	60	70	59	52
VOCATIONAL	4,380	4,303	4,258	4,123	3,928	3,752	3,629	3,587	3,569	3,529	3,480	191	59	84	0	0	0	0	67	89	67	56
OTHER	76	87	83	79	77	73	70	70	69	68	68	-	14	1	0	2	0	0	3	2	2	3
LIBRARY & SUPERVISION	915	908	895	866	826	789	763	754	750	742	731	39	28	22	6	3	2	6	20	24	20	18
GUIDANCE & COUNSELING	1,525	1,513	1,492	1,443	1,377	1,314	1,271	1,257	1,250	1,236	1,219	64	47	37	10	6	4	10	33	40	33	29
ADMINISTRATIVE	3,354	3,328	3,281	3,174	3,030	2,891	2,797	2,765	2,750	2,720	2,682	141	103	81	22	12	9	21	73	88	72	65
TOTAL ALL SUBJECTS	36,284	36,001	35,499	34,340	32,777	31,278	30,258	29,913	29,753	29,421	29,015	1,528	1,111	877	238	131	93	229	791	955	783	699

TABLE 8.27A

PROJECTED NEW SECONDARY SCHOOL TEACHER GRADUATES,¹ BY SUBJECT, IN ONTARIO

SUBJECT	NEW TEACHER GRADUATES, FULL-TIME EQUIVALENT										
	ACTUAL 1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
ENGLISH	265	140	87	33	8	3	31	75	86	75	74
FRENCH	157	74	46	18	4	2	17	41	47	41	40
FRANCAIS	21	10	6	2	1	0	2	5	6	5	5
CLASSICS	45	21	13	5	1	0	5	11	13	12	11
OTHER LANGUAGES	5	3	2	1	0	0	1	1	2	1	1
HISTORY	147	88	55	20	5	2	19	47	54	47	46
SOCIAL STUDIES	100	64	40	14	3	1	14	34	38	34	33
GEOGRAPHY	171	76	50	19	4	2	18	43	50	43	43
MUSIC	71	38	24	9	2	1	8	20	23	20	20
MATHEMATICS	115	62	39	15	3	1	14	34	38	34	33
PHYSICS	16	9	5	2	0	0	2	5	5	5	5
CHEMISTRY	29	18	11	4	1	0	4	10	11	10	9
SCIENCES	286	107	74	30	6	2	27	65	74	65	64
HOME ECONOMICS	55	29	18	7	2	1	6	16	18	16	16
PHYSICAL EDUCATION	325	175	106	41	9	3	38	93	106	93	92
FINE ARTS	136	70	46	17	4	1	16	39	44	39	38
COMMERCIAL	163	79	50	19	4	2	18	44	50	44	43
VOCATIONAL	79	34	23	9	2	1	8	20	23	20	19
OTHER	438	177	112	46	10	4	42	100	115	101	99
LIBRARY & SUPERVISION	79	38	24	9	2	1	9	21	24	21	21
GUIDANCE & COUNSELING	131	64	40	16	3	1	15	35	40	35	35
ADMINISTRATIVE	289	140	89	34	8	3	32	77	88	78	76
TOTAL ALL SUBJECTS	3,123	1,516	960	370	82	31	346	836	955	839	823

¹Based on assumption that new teacher graduates required would be equal to 70% of new hirings.

TABLE 8.27B
PROJECTED NEW SECONDARY SCHOOL TEACHER GRADUATES,¹ BY SUBJECT, IN ONTARIO

SUBJECT	NEW TEACHER GRADUATES, FULL-TIME EQUIVALENT										
	ACTUAL 1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
ENGLISH	265	138	90	89	90	90	90	90	90	90	90
FRENCH	157	74	48	49	49	49	49	49	49	49	49
FRANCAIS	21	10	6	7	6	6	6	6	6	6	6
CLASSICS	45	21	14	14	14	14	14	14	14	14	14
OTHER LANGUAGES	5	3	2	2	2	2	2	2	2	2	2
HISTORY	147	87	57	54	57	56	56	56	56	56	56
SOCIAL STUDIES	100	63	41	38	41	40	40	40	40	40	40
GEOGRAPHY	171	75	52	52	51	52	52	52	52	52	52
MUSIC	71	37	25	24	25	24	24	24	24	24	24
MATHEMATICS	115	61	41	40	40	40	40	40	40	40	40
PHYSICS	16	9	6	6	6	6	6	6	6	6	6
CHEMISTRY	29	18	12	11	12	12	11	12	11	11	11
SCIENCES	286	106	77	80	76	78	78	77	78	77	77
HOME ECONOMICS	55	29	19	19	19	19	19	19	19	19	19
PHYSICAL EDUCATION	325	173	110	110	112	111	111	111	111	111	111
FINE ARTS	136	69	48	46	47	47	46	47	47	46	46
COMMERCIAL	163	78	52	52	52	52	52	52	52	52	52
VOCATIONAL	79	33	24	24	23	24	24	23	24	24	24
OTHER	438	176	116	124	119	120	121	120	120	121	120
LIBRARY & SUPERVISION	79	38	25	25	25	25	25	25	25	25	25
GUIDANCE & COUNSELING	131	63	42	42	42	42	42	42	42	42	42
ADMINISTRATIVE	289	139	92	93	93	93	93	92	93	92	92
TOTAL ALL SUBJECTS	3,123	1,500	999	1,001	1,001	1,002	1,001	999	1,001	999	998

¹Based on assumption that supply of new teacher graduates would be reduced to 1,000 in 1979 and would remain at that level up to 1987.

TABLE 8.28A

PROJECTED SECONDARY SCHOOL TEACHER SUPPLY,¹ BY SUBJECT, IN ONTARIO

SUBJECT	TEACHER SUPPLY, FULL-TIME EQUIVALENT										
	ACTUAL 1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
ENGLISH	3,990	3,979	3,912	3,798	3,657	3,517	3,413	3,359	3,319	3,269	3,220
FRENCH	1,335	1,342	1,315	1,262	1,197	1,133	1,039	1,072	1,062	1,047	1,031
FRANCAIS	198	189	178	164	150	136	125	118	113	107	102
CLASSICS	117	136	146	147	144	140	141	148	157	165	172
OTHER LANGUAGES	268	257	246	234	222	210	200	191	183	174	166
HISTORY	1,755	1,799	1,807	1,783	1,742	1,699	1,675	1,680	1,692	1,697	1,701
SOCIAL STUDIES	821	857	865	846	817	786	770	775	784	789	793
GEOGRAPHY	1,790	1,819	1,823	1,799	1,757	1,715	1,691	1,692	1,701	1,702	1,703
MUSIC	623	622	607	576	541	507	482	471	464	454	445
MATHEMATICS	3,899	3,837	3,754	3,654	3,541	3,430	3,337	3,266	3,202	3,136	3,071
PHYSICS	498	497	490	481	470	459	450	445	440	435	430
CHEMISTRY	585	587	582	570	555	540	529	525	522	518	513
SCIENCES	2,366	2,404	2,404	2,358	2,290	2,220	2,178	2,176	2,183	2,181	2,178
HOME ECONOMICS	1,272	1,188	1,102	1,018	931	852	786	735	691	649	610
PHYSICAL EDUCATION	2,543	2,623	2,629	2,571	2,479	2,385	2,332	2,338	2,357	2,362	2,366
FINE ARTS	1,278	1,270	1,237	1,175	1,104	1,034	984	961	945	925	905
COMMERCIAL	2,696	2,671	2,616	2,539	2,445	2,353	2,282	2,240	2,206	2,167	2,128
VOCATIONAL	4,380	4,277	4,171	4,056	3,934	3,816	3,709	3,617	3,531	3,444	3,359
OTHER	76	257	360	390	381	366	391	475	571	648	719
LIBRARY & SUPERVISION	915	918	907	883	851	819	797	789	784	776	768
GUIDANCE & COUNSELING	1,525	1,531	1,512	1,471	1,418	1,365	1,328	1,314	1,306	1,293	1,281
ADMINISTRATIVE	3,354	3,367	3,327	3,236	3,119	3,003	2,922	2,891	2,874	2,846	2,817
TOTAL ALL SUBJECTS	36,284	36,427	35,990	35,011	33,745	32,485	31,611	31,278	31,087	30,784	30,478

¹Based on Table 8.27A.

TABLE 8.28B
PROJECTED SECONDARY SCHOOL TEACHER SUPPLY,¹ BY SUBJECT, IN ONTARIO

SUBJECT	TEACHER SUPPLY, FULL-TIME EQUIVALENT										
	ACTUAL 1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
ENGLISH	3,990	3,976	3,913	3,858	3,801	3,747	3,697	3,648	3,601	3,556	3,512
FRENCH	1,335	1,342	1,317	1,296	1,277	1,258	1,241	1,224	1,208	1,193	1,179
FRANCAIS	198	189	178	169	159	150	142	135	129	123	118
CLASSICS	117	136	147	157	167	177	187	196	205	214	223
OTHER LANGUAGES	268	257	246	235	225	215	206	197	189	181	174
HISTORY	1,755	1,798	1,808	1,819	1,830	1,840	1,851	1,861	1,871	1,880	1,889
SOCIAL STUDIES	821	856	865	870	879	886	893	900	907	913	919
GEOGRAPHY	1,790	1,818	1,824	1,834	1,839	1,846	1,853	1,860	1,867	1,874	1,880
MUSIC	623	621	607	592	579	566	554	543	532	522	513
MATHEMATICS	3,899	3,836	3,755	3,680	3,604	3,531	3,461	3,393	3,327	3,263	3,201
PHYSICS	498	497	491	486	481	476	471	466	461	456	452
CHEMISTRY	585	587	583	578	574	571	567	564	560	556	552
SCIENCES	2,366	2,403	2,406	2,411	2,413	2,417	2,421	2,424	2,427	2,429	2,431
HOME ECONOMICS	1,272	1,188	1,103	1,032	962	899	842	790	742	698	658
PHYSICAL EDUCATION	2,543	2,621	2,631	2,645	2,658	2,670	2,682	2,693	2,704	2,714	2,724
FINE ARTS	1,278	1,269	1,238	1,206	1,178	1,151	1,125	1,102	1,080	1,058	1,038
COMMERCIAL	2,696	2,670	2,617	2,574	2,528	2,484	2,443	2,403	2,365	2,328	2,292
VOCATIONAL	4,380	4,276	4,171	4,071	3,970	3,874	3,781	3,690	3,603	3,518	3,436
OTHER	76	256	363	474	574	670	763	850	933	1,013	1,088
LIBRARY & SUPERVISION	915	918	908	900	891	883	875	868	861	855	848
GUIDANCE & COUNSELING	1,525	1,530	1,513	1,499	1,485	1,471	1,459	1,447	1,436	1,424	1,414
ADMINISTRATIVE	3,354	3,366	3,329	3,299	3,267	3,237	3,210	3,183	3,158	3,134	3,111
TOTAL ALL SUBJECTS	36,284	36,410	36,013	35,685	35,341	35,019	34,724	34,437	34,166	33,902	33,652

¹Based on Table 8.27B.

TABLE 8.29A

PROJECTED ADDITIONAL SURPLUS OR DEFICIT, OF ONTARIO SECONDARY SCHOOL TEACHERS, BY SUBJECT
(based on supply of teacher graduates shown in Table 8.28A)

SUBJECT	SURPLUS STOCK OF TEACHERS, FULL-TIME EQUIVALENT - SUPPLY MINUS DEMAND										
	ACTUAL 1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
ENGLISH	0	82	52	56	96	115	121	106	82	69	64
FRENCH	0	8	4	- 6	- 15	- 22	- 29	- 33	- 37	- 40	- 41
FRANCAIS	0	- 14	- 21	- 27	- 33	- 39	- 44	- 49	- 53	- 57	- 60
CLASSICS	0	7	22	29	29	31	36	44	54	63	71
OTHER LANGUAGES	0	- 28	- 29	- 30	- 33	- 32	- 34	- 41	- 47	- 54	- 59
HISTORY	0	107	133	152	194	220	243	266	285	305	329
SOCIAL STUDIES	0	50	65	73	80	82	89	102	114	127	140
GEOGRAPHY	0	15	52	90	120	155	182	200	217	235	256
MUSIC	0	9	- 13	- 21	- 31	- 39	- 46	- 51	- 55	- 59	- 61
MATHEMATICS	0	2	- 45	- 22	37	84	100	66	19	- 11	- 33
PHYSICS	0	9	- 5	3	12	23	28	28	25	25	25
CHEMISTRY	0	- 12	- 4	6	13	24	30	32	31	33	35
SCIENCES	0	62	92	121	156	183	208	228	246	265	289
HOME ECONOMICS	0	-101	-164	-201	-238	-262	-291	-331	-369	-399	-424
PHYSICAL EDUCATION	0	111	154	172	192	202	220	250	280	308	341
FINE ARTS	0	- 2	- 22	- 39	- 56	- 73	- 87	- 98	-108	-116	-122
COMMERCIAL	0	- 50	- 48	- 36	- 20	5	10	- 7	- 28	- 43	- 51
VOCATIONAL	0	- 26	- 87	- 67	6	64	80	30	- 38	- 85	-121
OTHER	0	170	277	311	304	293	321	405	502	580	651
LIBRARY & SUPERVISION	0	10	12	17	25	30	34	35	34	34	37
GUIDANCE & COUNSELING	0	18	20	28	41	51	57	56	56	57	62
ADMINISTRATIVE	0	39	46	62	89	112	125	126	124	126	135
TOTAL ALL SUBJECTS	0	426	491	671	968	1,207	1,353	1,365	1,334	1,363	1,463

TABLE 8.29B

PROJECTED ADDITIONAL SURPLUS OR DEFICIT, OF ONTARIO SECONDARY SCHOOL TEACHERS, BY SUBJECT
(based on supply of teacher graduates shown in Table 8.28B)

SUBJECT	SURPLUS STOCK OF TEACHERS, FULL-TIME EQUIVALENT - SUPPLY MINUS DEMAND										
	ACTUAL 1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
ENGLISH	0	79	53	116	240	345	405	395	364	356	356
FRENCH	0	8	6	28	65	103	123	119	109	106	107
FRANCAIS	0	- 14	- 21	- 22	- 24	- 25	- 27	- 32	- 37	- 41	- 44
CLASSICS	0	7	23	39	52	68	82	92	102	112	122
OTHER LANGUAGES	0	- 28	- 29	- 29	- 30	- 27	- 28	- 35	- 41	- 47	- 51
HISTORY	0	106	134	188	282	361	419	447	464	488	517
SOCIAL STUDIES	0	49	65	97	142	182	212	227	237	251	266
GEOGRAPHY	0	14	53	125	202	286	344	368	383	407	433
MUSIC	0	- 10	- 13	5	7	20	26	21	13	9	7
MATHEMATICS	0	- 3	- 44	4	100	185	224	193	144	116	97
PHYSICS	0	- 9	- 4	8	23	40	49	49	46	46	47
CHEMISTRY	0	- 12	- 3	14	32	55	68	71	69	71	74
SCIENCES	0	61	94	174	279	380	451	476	490	513	542
HOME ECONOMICS	0	- 101	- 163	- 187	- 207	- 215	- 235	- 276	- 318	- 350	- 376
PHYSICAL EDUCATION	0	109	156	246	371	487	570	605	627	660	699
FINE ARTS	0	- 3	- 21	8	18	44	54	43	27	17	11
COMMERCIAL	0	- 51	- 47	1	63	136	171	156	131	118	113
VOCATIONAL	0	- 27	- 87	52	42	122	152	103	34	11	- 44
OTHER	0	169	280	395	497	597	693	780	864	945	1,020
LIBRARY & SUPERVISION	0	10	13	34	65	94	112	114	111	113	117
GUIDANCE & COUNSELING	0	17	21	56	108	157	188	190	186	188	195
ADMINISTRATIVE	0	38	48	125	237	346	413	418	408	414	429
TOTAL ALL SUBJECTS	0	409	514	1,345	2,564	3,741	4,466	4,524	4,413	4,481	4,637

TABLE 8.30
HISTORIC AND PROJECTED SOURCES OF ACQUISITION OF SECONDARY SCHOOL TEACHERS IN ONTARIO

R E A S O N	A C T U A L							P R O J E C T E D									
	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987		
FROM ELEMENTARY & SECONDARY	37	27	58	30	222	70	65	22	10	8	19	64	79	65	57		
FROM TRAINABLE MENTALLY RETARDED	2	6	6	4	5	3	2	1	0	0	1	2	3	2	2		
OUTSIDE ONTARIO	129	115	117	119	66	59	44	12	7	5	11	40	48	39	35		
ON EXCHANGE	53	37	53	62	90	43	37	11	6	4	10	34	42	34	30		
LETTER OF STANDING	64	80	88	72	24	35	24	6	4	2	6	21	26	21	19		
LETTER OF PERMISSION	0	170	166	123	40	63	41	10	6	4	11	37	44	36	33		
TEMPORARY CERTIFICATE	18	23	49	45	34	25	19	5	3	2	5	18	21	17	15		
NEW GRADUATES	1,996	1,594	1,412	1,672	1,050	814	645	171	95	68	166	575	694	569	508		
PART-TIME	218	239	235	190	286	244	242	237	157	155	204	211	211	208	206		
OTHER	699	424	588	580	240	457	414	333	260	245	314	337	331	327	325		
RE-ENTRIES	606	496	685	522	560	593	558	522	363	351	459	481	477	472	467		
TOTAL ACQUISITIONS	3,822	3,210	3,456	3,419	2,614	2,405	2,091	1,330	911	843	1,206	1,820	1,974	1,790	1,697		

TABLE 8.31
HISTORIC AND PROJECTED REASONS FOR WITHDRAWALS OF SECONDARY SCHOOL TEACHERS IN ONTARIO

R E A S O N	A C T U A L						P R O J E C T E D									
	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	
TEACH IN ONTARIO	115	140	163	112	166	153	147	154	145	138	133	128	127	126	125	
TEACH OUTSIDE	127	189	141	137	88	124	116	107	110	103	98	96	94	93	92	
TEACH TRAINABLE MENTALLY RETARDED	3	12	3	3	0	2	1	1	1	1	1	1	1	1	1	
TEACH PART-TIME	195	222	191	183	145	177	169	161	162	153	145	141	139	138	137	
TEACH IN CAAT	24	27	11	8	7	9	8	8	8	7	7	7	7	7	7	
ON EXCHANGE	36	30	51	63	85	70	74	76	70	68	65	63	62	62	61	
ENROL IN UNIVERSITY	219	250	217	222	159	203	195	182	185	174	165	161	159	158	156	
ADMINISTRATIVE	136	192	194	186	182	193	189	186	181	172	164	159	157	157	155	
EMPLOY OUTSIDE	551	600	484	465	295	421	393	362	374	350	331	324	319	317	314	
HOUSEHOLD, MARRY	648	627	543	528	365	487	460	429	438	411	389	381	374	373	369	
RETIREMENT	414	317	304	361	335	345	350	339	329	316	300	291	287	286	282	
ILLNESS	38	46	53	47	46	50	48	47	46	44	42	41	40	40	40	
DEATH	36	58	39	49	53	49	51	51	48	47	44	43	42	42	42	
OTHER	408	338	425	375	381	406	391	387	377	358	342	332	327	326	322	
TOTAL WITHDRAWAL	2,960	3,045	2,814	2,737	2,308	2,687	2,592	2,489	2,473	2,341	2,226	2,166	2,134	2,124	2,101	

instance, in boards with widely dispersed populations -- there is no way the decrease in administrative staff can be proportional to the decline in students (or in number of teachers, for that matter). The information for combined elementary and secondary schools in recent years from the education staff record of the Ministry of Education are in Table 8.32.

It seems impossible to determine exactly how many supervisory or administrative officers (including consultants, coordinators, etc.) there are in the system as a whole. The figures of Table 8.34 indicate they reach up to 21% of the staffs of schools alone.¹ I note that Scott, Hickcox, McLeod, and Ryan, in their Working Paper #9 for this Commission, were careful to report such staff only for the 11 boards in their sample. From the figures given on p. 39 of their report, one may deduce that the 11 boards began with 120 supervisory officer positions, have lost 17 (14.17%) and expect to lose eight more for a total of 25 (20.83%).² During the period total enrolment declined (see pp. 7 and 8) from 284,928 in 1972-73 to 251,346 in 1977-78, or by 33,582 (11.79%). The first seven boards project a further loss by 1982-83, from an enrolment of 203,350 in 1977-78 to 163,110 (19.79%), so overall possibly the decline in supervisory or central office will bear some relationship to the decline in enrolment. The sample used was carefully chosen, but nevertheless I hesitate to generalize and conclude that for the province as a whole reductions in the supervisory staff are more or less proportional to declines in enrolment. What is clear, however, is that cutbacks in staff are being made in the supervisory officer class and in other categories of central office staff, which is referred to very frequently in a pejorative sense as "the administration".

It is essential to avoid misunderstanding on this matter of staff cutbacks at various levels, and therefore I recommend:

¹The number of full-time teachers plus full-time equivalents of part-time teachers equals 99,003, which, combined with full-time and full-time equivalents of other staff (26,756) totals 125,759.

²See also the Report on Principals by Brown, O'Toole, DeFour, Working Paper #13, Commission on Declining School Enrolments in Ontario, 1978.

TABLE 8.32

Classification of Teachers by Type of Position Held¹ for All Schools

Year (Sept)		Enrolment	Position in System					Total
			Regular Class Teacher	Prin.	Vice- Prin.	Chair., Dept. Hd. Asst. D. Hd.	Others ²	
1971	No. %	2,031,360 100.00	Not Avail.	Not Avail.	Not Avail.	Not Avail.	Not Avail.	Not Avail.
1972-73	No. %	2,028,114 99.84	74,182 78.02	4,465 4.70	2,333 2.45	9,873 10.38	4,235 4.45	95,088 100.00
1973-74	No. %	2,008,610 98.88	71,713 77.51	4,371 4.72	2,257 2.44	9,167 9.91	5,019 5.42	92,527 100.00
1974-75	No. %	1,994,489 98.18	72,551 77.95	4,393 4.72	2,260 2.43	9,336 10.03	4,530 4.87	93,070 100.00
1975	No. %	1,994,638 98.19	73,699 78.04	4,392 4.65	2,271 2.40	7,475 7.91	6,609 7.00	94,446 100.00
1976	No. %	1,973,140 97.13	73,609 77.95	4,340 4.60	2,309 2.44	7,440 7.88	6,729 7.13	94,427 100.00
1977	No. %	1,943,226 95.66	72,796 77.54	4,307 4.59	2,310 2.46	7,578 8.07	6,891 7.34	93,882 100.00

(1) Taken from a different information file in Ministry and hence do not necessarily check with figures given in actual tables of the Report of the Minister. Change also made in "year" in 1975. See also Table 8.1 and Table 8.2 for public schools.

(2) Consultant, Coordinators, Supervisors, Others, Not Reported; these data refer only to those employed in schools, not in the system as a whole.

TABLE 8.33
ANALYSIS OF ONTARIO SCHOOL STAFF, BY TEACHERS AND OTHER STAFF (1975)
TEACHER AND OTHER SPECIFIED STAFF, SEPTEMBER 1975

S T A F F	PUBLIC	ROMAN CATHOLIC SEPARATE	TOTAL ELEMENTARY	SECONDARY	TOTAL ALL SCHOOLS
<u>TEACHERS</u>					
NUMBER OF FULL-TIME TEACHERS	40,711	17,456	58,167	34,826	92,993
NUMBER OF PART-TIME TEACHERS	6,676	4,732	11,408	1,273	12,681
FULL-TIME EQUIVALENT OF PART-TIME TEACHERS	2,808	2,248	5,056	641	5,697
<u>OTHER STAFF</u>					
PAID TEACHER AIDES					
FULL-TIME	653	165	818	216	1,034
PART-TIME	815	202	1,017	168	1,185
FULL-TIME EQUIVALENT OF PART-TIME	297	72	369	55	424
AUDIO-VISUAL TECHNICIANS, LABORATORY TECHNICIANS, AND EDUCATION RESOURCE TECHNICIANS					
FULL-TIME	55	14	69	425	494
PART-TIME	221	56	277	124	401
FULL-TIME EQUIVALENT OF PART-TIME	45	19	64	41	105
VOLUNTEER TEACHER AIDES					
PART-TIME	12,618	2,200	14,818	342	15,160
FULL-TIME EQUIVALENT OF ABOVE	996	177	1,173	27	1,200
OFFICE STAFF*					
FULL-TIME	1,509	547	2,056	2,968	5,024
PART-TIME	1,838	970	2,808	277	3,085
FULL-TIME EQUIVALENT OF PART-TIME	941	470	1,411	138	1,549
SCHOOL BUSINESS MANAGERS					
FULL-TIME	4	7	11	69	80
PART-TIME	4	6	10	1	11
FULL-TIME EQUIVALENT OF PART-TIME	1	4	5	--	5

* Office staff includes secretaries, stenographers, typists, etc.
Source: See Table 8.32.

TABLE 8.34

ANALYSIS OF ONTARIO SCHOOL STAFF, BY TEACHERS AND OTHER STAFF (1976)
TEACHER AND OTHER SPECIFIED STAFF, SEPTEMBER 1976

S T A F F	PUBLIC	ROMAN CATHOLIC SEPARATE	TOTAL ELEMENTARY	SECONDARY	TOTAL ALL SCHOOLS
<u>TEACHERS</u>					
NUMBER OF FULL-TIME TEACHERS	40,464	17,343	57,807	35,352	93,160
NUMBER OF PART-TIME TEACHERS	6,161	4,842	11,458	1,355	12,813
FULL-TIME EQUIVALENT OF PART-TIME TEACHERS	2,854	2,295	5,149	694	5,843
<u>OTHER STAFF</u>					
PAID TEACHER AIDES					
FULL-TIME	697	178	875	188	1,063
PART-TIME	755	228	983	187	1,170
FULL-TIME EQUIVALENT OF PART-TIME	275	100	375	55	430
AUDIO-VISUAL TECHNICIANS, LABORATORY TECHNICIANS, AND EDUCATION RESOURCE TECHNICIANS					
FULL-TIME	60	17	77	396	473
PART-TIME	198	48	246	120	366
FULL-TIME EQUIVALENT OF PART-TIME	42	17	58	41	99
VOLUNTEER TEACHER AIDES					
PART-TIME	12,772	2,280	15,052	309	15,361
FULL-TIME EQUIVALENT OF PART-TIME	932	190	1,122	28	1,150
OFFICE STAFF*					
FULL-TIME	1,556	581	2,137	2,916	5,053
PART-TIME	1,755	987	2,742	289	3,031
FULL-TIME EQUIVALENT OF PART-TIME	909	471	1,380	145	1,525
SCHOOL BUSINESS MANAGERS					
FULL-TIME	5	3	8	70	78
PART-TIME	3	3	6	--	6
FULL-TIME EQUIVALENT OF PART-TIME	2	1	3	--	3
OTHER**					
FULL-TIME	455	215	670	448	1,118
PART-TIME	864	353	1,217	188	1,405
FULL-TIME EQUIVALENT OF PART-TIME	247	91	339	64	403

*Office staff includes secretaries, stenographers, typists, etc.

**Not reported previous year.

Source: See Table 8.32.

The Minister of Education collect and distribute annually complete information in regard to the number, qualifications, age and sex of all categories of school staff, including support staff, employed by school board in this province.¹

With no official or adequate evidence upon which to base my comments and conclusions, not even total numbers for the province, I cannot discuss reasonably such matters as salaries, certification and qualifications, types of appointment, conditions of employment and fringe benefits such as superannuation (presumably under the Teacher's Superannuation Fund). I believe that all of the administrative and supervisory staff -- or nearly all of them -- hold teaching certificates valid in Ontario, but the only other generalization it is reasonably safe to make is that conditions in regard to all these factors vary widely from board to board and are changing from year to year, in part, at least, as a result of the pressures arising from enrolment declines. Some of the groups have associations of their own, such as the school business officials and the powerful group which makes up OAEAO (Ontario Association of Education Administrative Officials), but in most other respects the "lesser lights" are classified with the teachers, not with management. Perhaps we don't need to unscramble this one for our present purpose, but at least it would help the Minister if she had a clear view of the whole education scene in the province.

On one point I do wish to comment, since it arises directly as one of the implications of declining school enrolments. As is well known now, and as we have widely publicized, mobility within the school system has practically disappeared.² The school system will "freeze solid" unless we deliberately crack it open and stir it up through artificial means. Horizontal mobility can be built in fairly easily, through exchanges and transfers at the same level, without risking either seniority or security, and this should be done as much as possible, as I state elsewhere, through the use of such means as study leaves and other

¹Complete data are not given in the 1977 Report of the Minister, although they were for 1975 and 1976.

²For a discussion of the effects, see Hunt and Hunt, Working Paper #12, Commission on Declining School Enrolments in Ontario, 1978.

forms of leaves of absence and secondments (to the Ministry, universities, community colleges and OISE).

To introduce vertical mobility, while at the same time protecting seniority and job security, means setting up what many would view an artificial cycling process of promotions and returns to the ranks on a short-term basis. Traditionally, appointment to a senior administrative position has been for life (a life sentence, as one wag who is an incumbent phrased it), although legally and in actuality the position is at the pleasure of the board (and some boards have recently, under pressure, revealed their displeasure). With the present change in administrative organization and style from bureaucratic to political, there are strong reasons to change the pattern and move to term rather than life appointments. It is not an untried move in education; it has worked successfully within the university system, from the presidency down to the chairmanships or heads of departments. (The system does not apply, of course, on the business administrative side or in computer organizations where specific expert technical skills are required, except where a position is a purely administrative one.) For academic supervisory staff it would seem reasonable to have three-year term appointment (with reversion to the teaching ranks) for junior positions. For senior positions there could be five-year terms (possibly seven for the director) with reversion to lower administrative positions or to teaching, if the incumbent so desires and is properly qualified. If the administrative positions were so structured that only a modest supplement were paid during the years of incumbency, which is rapidly becoming standard practice in the universities (except for the position of president), the cycling process would cost little and work no real hardship financially or otherwise on the incumbent -- or on the board and the taxpayers. When the system is initially introduced, the present incumbents would be deemed to have just commenced their duties and would, upon completion of a first term, be eligible to apply for and, subject to either a thorough review or the findings of a full search committee, be appointed for a second term. Following that second term, however, a period in length equal to one full term should have to elapse before the former incumbent would be eligible to apply for and be appointed again to his previous position. No person should stay in the same office

longer than two terms. At any time, of course, following the first term or the second term, the incumbent would be eligible to apply for a different administrative position (or a teaching position) with the board, subject, of course, to open competition and search committee procedures. Accordingly, I recommend:

The Minister of Education amend the Acts and Regulations to provide for term appointments for all supervisory and administrative positions for each board in the province, and the Regulations specify the period and conditions of such term appointments, including the amount of stipend which may be paid and recognized for legislative grant purposes.¹

The suggestions, based on my university experience, immediately preceding this recommendation, may be used as guidelines. The salary of the person removed from incumbency after expiration of the term of office should be "red-circled" until such time as, in the natural course of events, the usual salary increases close the gap. In the highly unlikely event of a period of deflation, such as occurred during the Great Depression of the 1930's, the red-circled salary would be automatically "deflated" each year (using the Consumer Price Index, for example) until it fell within the normal salary range of the new position.

These recommendations will not increase the costs of education in our province. They won't decrease them either, but they should provide for a livelier, healthier and more forward-looking and innovative administration of our schools. They will also, through increased mobility (especially vertical) improve greatly the spirit and morale of all categories of the teaching staff.

8.4 Support Staff

Since I could find very little published information about support staff in our schools, except the data reported in Tables 8.33 and 8.34 for 1975 and 1976, I commissioned a special study, by Lawton and Boodoo, which has been published as this Commission's Working Paper #10, entitled

¹The same practice should apply, under the same conditions, to employees of the Ministry of Education, at the central offices and in the regional offices.

The Impact of Declining School Enrolments on Non-Certificated Staff in Ontario. By "non-certificated" was meant those members of staff of a board who do not hold a teaching certificate valid in Ontario. The categorization scheme used in the study was the Ministry of Education's Uniform Code of Accounts, largely because of its detailed classification scheme for non-certificated staff, its cross-classifications of staff and its close linkage to the allocation of resources in school boards, all of which enables one to conduct financial as well as staffing analyses.

To secure data the researchers selected a sample of 12 school boards, as closely as possible representative of the diversity of school boards in Ontario. Other sources were the Ministry of Education, the Ontario Institute for Studies in Education, the Ontario Municipal Employees Retirement Board (OMERS) and the Ontario Board of Examiners in Psychology. Qualitative data were secured by interviews with individuals representing the Canadian Union of Public Employees and the Ontario Psychological Association. Rates of attrition due to retirement, disability and mortality for these staffs were secured from a publication by Anthony, et al (1976, pp. 84-86). The study was concerned with business administration, technical and specialized services and secretarial, clerical, plant operation, maintenance, transportation, educational services, attendance, health and food services staffs.

Projections were made to 1986, using the normative approach, i.e., ratios of non-certificated to certificated staff, non-certificated staff to students and non-certificated staff to schools. No attempt was made to project other than overall figures, except by functional category for the sample boards, because of the tremendous variety of non-certificated staff positions. For the totals, however, both supply and demand were considered over the period from 1976 to 1986. Projections for demand were based on projected enrolment of students, using current ratios of staff to students, but supply was estimated on the basis of existing stock reduced by attrition of those over 55 years of age. Basically, four major questions were considered: (1) what is an appropriate number of non-certificated staff for a given school board? (2) what will be the future demand for non-certificated staff? (3) what will be the

future supply of non-certificated staff? and (4) what are the implications of the balance between this supply and demand?

The general findings of the study indicate that while the average board will probably be able to hire additional non-certificated staff in the coming years, the boards will vary greatly in the balance of supply and demand. Public school boards, since their schools tend to be larger, will have greater flexibility than separate school boards. City boards have higher ratios of non-certificated staff to regular teachers than county and district boards and in the projections these ratios did not decline as rapidly as enrolment (a lag arising from factors not immediately affected by enrolment declines). Surpluses of staff will show up in large boards (especially public) in a city or suburban district experiencing a rapid rate of decline in school enrolment.

In many categories the non-certificated staff seem to be assigned to individual schools by formula. The others were either central office staff or assigned according to "need" (undefined). The formulae used were based on number of students, of teachers or of classes, all of which often resulted in dramatic changes in numbers of non-certificated staff. There is unlikely to be any sudden or massive lay-offs of support staff, although some members of staff will be dismissed as enrolments decline. But in general attrition has been and will be able to solve many if not all the problems. The major management problem apparently arises because of the uncertainty, from year to year, about the size and form of the provincial grants. Many staff members, facing these uncertainties, have clauses related to seniority and lay-offs in their collective agreements. It should be noted that seniority is often defined within specified functional areas or hierarchical level and there are clauses referring to bumping and grievance procedures. The practice of boards to "contract out" to private companies for maintenance, operations, and transportation services poses a far greater threat to job security than does declining enrolments.

In summing up, the authors concluded that the current staffing patterns for non-certificated employees are reasonable, the number of

such staff could decline from about 31,700 in 1976 to about 22,700 in 1986 for the province as a whole, but since this will be largely covered by attrition (except for a few boards) the employment outlook for non-certificated staff is good -- provided the practice of contracting out for services does not become widespread. There may be more part-time employees used as enrolments decline, so the protection of their rights -- and fringe benefits -- especially in regard to pensions, assumes importance. Aging of staff will, of course, also become a problem as fewer young workers are hired.

To protect non-certificated staff of school boards both short-term and long-term plans will have to be developed. Accordingly, I recommend:

Each school board prepare immediately, for submission to the Ministry of Education by June, 1979, short-term plans up to 1983 and long-term plans to 1988 covering the conditions of employment, supply and demand, remuneration and pensions of full-time and part-time non-certificated staff members, including plans, if any, for contracting out services at present or in the future.

The Minister of Education will, upon receipt of these reports, and following a review and compilation of the results, at least have the data needed to understand the situation in regard to support staff.

I recommend that, in order to clarify the situation:

The Ministry of Education conduct an investigation into the causes and effects of contracting out to determine the relative benefits to the education system and society as a whole, and that the Canadian Union of Public Employees and other interested labour and professional associations be directly involved in this investigation.

I recommend, further:

A detailed staffing and cost study be made for secondary schools, similar to that already completed by Rideout (1977) for elementary schools, to include a review of formulae for allocating staff and a series of case studies of the roles played in education by non-certificated staff and their contributions to our schools.

I recommend:

Where non-certificated staff, such as registered psychologists, are assigned to active work in special education programs, they be counted, in proportion to their involvement in the program, in the weighting factor for special education used in the calculation of legislative grants to school boards.

I am concerned that the relatively large number of small and incomplete bargaining units which exist may adversely affect the welfare of non-certificated staff members, particularly in cases where many members of staff do not belong to any bargaining unit. When they are fractionated in this way, or lack any union at all during a time of fierce competition for the reduced number of real education dollars, the non-certificated staff are almost certain to lose, relatively if not absolutely. Therefore, I support and advance the following part of the recommendation made by the Lawton-Boodoo study team:

... there be only two bargaining units involved with non-certified staff for each board, one for secretarial and clerical staff, lay assistants, attendance counsellors, audio-visual technicians, and psychologists, and the other for maintenance, operations, transportation, and cafeteria personnel.

I recommend, further:

Every staff member be included in one of the bargaining units mentioned immediately above, or at least that strong encouragement to this end be provided by each school board.

Part-time employees be included in the bargaining units and be granted the same fringe benefits, including pension opportunities, as full-time employees.

These recommendations do not carry implications for increased costs to education, and hence need not be costed out.

Appendix 8.A

Methods of dealing with redundant teachers suggested in briefs to the Commission:

1. Term renewable contracts

- (a) There should be term appointments for resource teachers.
- (b) Modification of tenure to a renewable policy for a limited time period would serve a double purpose to improve the system, by giving teachers the opportunity to work part-time and giving the system the opportunity to inject new blood.
- (c) All future appointments to positions of administrative responsibility should be term appointments.

2. Lower PTR

- (a) Boards should increase the number of remedial speech teachers. This will enable many students with speech defects to have treatment more often and/or at an earlier age.
- (b) Redundant teachers could be used in supportive roles within the education system.
- (c) Boards should recognize the advantages in having support staff perform remedial functions in school on an every day basis.
- (d) More support staff should be channelled into guidance counselling for elementary school students.

3. Job sharing (part-time, etc.)

- (a) Part-time contracts for teachers near the bottom of the salary scale should be retained to allow time for further self-development. It is understood that in these cases, experience and recognition for service benefits would be maintained. Part-time contracts could perhaps be encouraged before they become essential.
- (b) Married persons should be encouraged to share a position.
- (c) In situations where there will be no loss to the quality of education, the Ministry should encourage the boards to allow teachers to contract to teach a fraction of full-time at a corresponding fraction of salary without loss of tenure or superannuation benefits. It is essential that such a reduction in contracted time be voluntary on the part of the teachers.
- (d) As an incentive for teachers to work a part timetable, they should be credited with a full year of superannuation for each half year worked, until such time as enrolment decline levels out.

- (e) The boards' willingness to make part-time teaching more attractive would also provide teachers with the opportunity to investigate other careers, retrain, or upgrade their careers or qualifications, all of which they would normally not attempt to do in such uncertain economic times.
 - (f) High school teachers could teach part-time during the day and night classes for $2\frac{1}{2}$ hours each evening. For example, grade 13 "catch-up" English and math -- especially for university entrance purposes -- could be taught at night. This would give teachers the same number of hours, i.e., 25 per week ($12\frac{1}{2}$, days; $12\frac{1}{2}$, evenings). Full contributions to the Superannuation Fund would have to be maintained.
4. Mobility of senior teachers moving into jobs such as curriculum design, research, editing/writing for publishing companies, Canadian Armed Forces, External Affairs, CIDA
- (a) The Canadian government should be petitioned to change its foreign aid program to increase the number of Ontario (Canadian) teachers in Third World countries. Such teachers' salaries would be paid from the foreign aid budget of the federal government. (An Ontario teaching position should be guaranteed at the end of this service, if desired.)
 - (b) A provincial program should be set up so Canadian publishers are subsidized for hiring Ontario teachers to write/produce Canadian textbooks (or fiction), if the teachers agree to take a leave of absence from their teaching positions to work full-time for the publishing firms.
 - (c) Teacher service in the Canadian Armed Forces should be encouraged by introducing a monetary incentive for any practising Ontario teacher who takes a leave to join the Armed Forces. (Ontario teaching positions should be guaranteed on return, if desired, plus credit in the Superannuation Fund.)
5. Teaching of adults (special training required), recreation, physical education, etc.
- (a) The use of teachers with certification for full- and part-time positions in community colleges would aid in the utilization of a valuable human resource and, almost certainly, raise the quality of instruction.
 - (b) Boards should more actively seek out adult students in the community to encourage their return to day schools for the completion of graduation requirements.
 - (c) The Ministry of Education (or another appropriate ministry of the provincial government) should provide grants to school boards for adult students who enroll in non-credit programs in regular secondary schools.

- (d) There should be concentration on the development of programs which offer meaningful employment of leisure time with heavy emphasis on life skills. Drop-in schools should be created to meet the needs of dropouts.
- (e) The Acts and Regulations should be changed so that teachers for programs such as continuing education, night schools and day-care be certificated teachers under regular contract.

6. More data re: job location

- (a) More information should be made available about the geographic location of jobs. More knowledge of jobs available in different regions of Ontario might provide sufficient incentive for a newly-trained teacher to relocate.

(Note: This type of information could be stored in a data bank.)

- (b) The Ministry should establish a placement bureau for teachers.

7. Direction of students into specific fields

- (a) At the same time as we are releasing teachers, we find ourselves required to hire other teachers to meet specialized needs. It is important that teachers now on staff become as qualified as possible in areas where it appears the system will have a need.
- (b) As schools become smaller, the provision of special programming will require an increasing number of teachers of specialized subjects to work in more than one school. The only alternatives are to reduce the program or to employ more part-time staff. The latter is currently being done in some senior schools through the employment of a teacher who can teach a combination of special subjects or a special subject and part of the core curriculum.

8. Early retirement incentives

- (a) It should become policy of the Ontario Secondary School Teacher's Federation that a teacher be allowed to combine part-time years of experience, or to pro-rate to full-time any part-time salaries earned during his last seven years of teaching for the purpose of calculating his "best seven years" average salary, so that he can receive the same pension as a teacher who has taught full-time the same number of years, other things being equal.
- (b) Incentive schemes should be developed to encourage staff to retire at age 55 with an 85 factor, with payments to the Superannuation Fund adjusted as necessary.
- (c) The government should provide special grants of $7\frac{1}{2}\%$ of the last year's salary for each year the teacher retires early, with the percentage to be matched by the board, with a maximum

number of years (3), and with the money being paid to the teacher as part of the teacher's final year salary in the form of a final year salary bonus.

- (d) Teachers' federations should be encouraged to set up funds similar to RRSPs, with voluntary contributions from teachers, so that they may retire earlier than with the 90 factor, if they wish, on their own savings until such time as they are eligible for their superannuation. Teachers should bear full responsibility for cost.
- (e) One technique which would provide the teacher with time to adjust to early retirement would be a form of gradual re-retirement. The teacher could contract to teach two years at 80% of a full workload, two years at 60% and finally two years at 50%. At the end of the sixth year the teacher would retire.

The local collective agreement should be used to provide for cash payments to retiring teachers. Such payments could be a lump sum or spread over a few years. The funds would come from any savings realized by the hiring of less experienced teachers at lower salaries.

A teacher could go on a half-time schedule and acquire up to 10 years' full-time credit by additional payments into the Superannuation Fund.

- 9. Additional leaves of absence for personal as well as for education reasons, sabbatical leaves, leaves for retraining, etc. (with benefits)
 - (a) Education leave policies should be improved and expanded.
 - (b) A significant cash subsidy (e.g., \$1,000) should be paid to any teacher who chooses to travel, study or otherwise leave the profession for a year. (A teaching position should be guaranteed at the end of the year, if desired.)
 - (c) The possibility should be explored of having teachers seconded by the Ministry or other Ontario boards for two or more years in jobs which match the redundant teacher's qualifications and experience.
 - (d) Teacher colleges should be encouraged to prepare week-long or month-long refresher or retraining courses, e.g., in French or physical education, for small groups of teachers. These short-term leaves of absence might be financed partly by the board and partly by the teachers involved.
 - (e) School boards should consider granting sabbaticals for study or work exchange. These sabbaticals, at 75% of the regular salary, would create a surplus of one-quarter of the applicant's salary, which could be applied to pay a redundant teacher who normally would be at the beginning of the salary

scale. Government grants could make up the difference in the latter's salary. Senior teachers could apply for these sabbaticals on a voluntary basis.

10. Transfers, exchanges (intra- and interprovincial)

- (a) To promote national unity and to have a better knowledge of the education systems of all the provinces, a professional cultural exchange could be set up for all Canada. On an annual or semi-annual basis, a teacher could be twinned with another teacher in another province. Team planning and team teaching would promote a better understanding of our country and its regional differences both for the students of a particular province and for the teachers involved. To encourage teachers to participate in the program, some bonus could be established for teachers who broaden their experience in more than one province.
- (b) A computer-based system facilitating intraprovincial (temporary) transfers of experienced teachers should be set up.
- (c) Some boards are actively encouraging intra-system transfers and limiting the length of terms of positions of responsibility. This should be encouraged.
- (d) The Ministry should attempt to create and facilitate more exchange opportunities between education jurisdictions, between Ministry and boards, between boards in Ontario, between provinces and between nations.
- (e) Boards should facilitate and encourage inter-school transfers.
- (f) Boards should facilitate and encourage teacher exchange programs between systems in the province, interprovincially and internationally.
- (g) Boards should facilitate and encourage exchange programs with the Ministry of Education and the teacher training institutions.
- (h) In programs related to industry and commerce, boards should facilitate and encourage exchange programs involving teachers and their counterparts in the private sector.

11. Specialized schools

- (a) The Ministry of Education should work with the Ministry of Manpower and Immigration to have upgrading programs at the secondary school level for applicants under 18 who have been out of school at least a year. (At present, 16-year-old dropouts can get on Manpower rolls and be paid a weekly allowance to attend a community college.)

12. Re-education

- (a) The elementary school collective agreements should contain provisions for a retraining allowance. The secondary school

agreements provide the opportunity for teachers declared redundant to avail themselves of the opportunity to retrain in subject areas other than their own fields of expertise for subsequent reassignment.

- (b) Teachers should have to re-educate themselves and then teach outside the classroom, in the office and factory.
- (c) Teachers presently employed should be expected to take re-training programs after a fixed interval without loss of salary or benefits.
- (d) The Ministry should accept responsibility for the costs of retraining professional staff to meet provincial needs.
- (e) Teachers who now have jobs in education should be guaranteed job protection, not necessarily in their present positions, but in jobs that would contribute to meeting education needs of the province.

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Appendix 8.B

Examples of Board Policies and Practices and Suggestions

(1) Waterloo County Board of Education (Brief #156) - Abstract

The following possibilities exist for those teachers who are still unplaced after staffing has been completed throughout the county:

- (A) Placement as a supply teacher with no change in contract status.
- (B) If funding is available, assignment to curriculum development and coordination and/or as additional support personnel (for example, guidance in junior schools, English as a Second Language, gifted students).
- (C) Part-time work with commensurate pay.
- (D) Night school or summer school teaching at hourly rates of pay, rather than under contract.
- (E) Employment with the board to fill a vacancy in a non-teaching position suited to the teacher's talents, skills and qualifications, at a salary commensurate with the position.
- (F) Leave of absence in accordance with board policy.
- (G) Leave of absence for retraining through funding provided by federations and other agencies.

(2) The Palo Alto Early Retirement Program for Teachers

The progressive early retirement plan for teachers in Palo Alto, California, is a positive example of what can be done by school boards and teachers. It is available after 10 years of full-time satisfactory service and attainment of age 50.¹

¹See The Challenge of Declining Enrolment, Submission from the Ontario Secondary School Teacher's Federation to the Commission on Declining Enrolment, December, 1977, Appendix C, pp. 44-45.

A Proposal for Research Studies on Job-Sharing by Teachers

One obvious solution to the retention of more teachers is job-sharing. The author proposes to the Commission that it give serious consideration to recommending that a number of careful studies, including research in a number of jurisdictions to test out various models or formulae, be conducted in the next year or two, to determine the acceptability and effects of job sharing.

Possible Formulae

In the past, a full-time teaching assignment has referred either to the total instruction of one class or the teaching of one or more subjects to a specified set of classes. Both definitions are useful in a discussion of job-sharing.

In most elementary schools, the first definition would apply to job-sharing. Through some form of team planning and instruction, the teaching of a specified set of classes would be done by a number of teachers larger than the number of classes. The practical ratio limits would probably be 2:1 and 10:9. Toward the lower end (3:2, 4:2) the economic disadvantages would generally be too unattractive, while at the upper end (10:7, 10:8) the administrative problems would become too great and there would be reduced benefits in the number of positions "saved" by the procedure. Possible formulae would be 2:1; 3:2; 4:2; 5:3; 5:4; 6:3; 6:4; 6:5; 10:8; 10:9.

In general, those formulae in the middle of the series would be most attractive, with the closest to the ideal being 5:4. This grouping represents a manageable team size and would provide each teacher with one day per week for outside activities, either on a regular or a rotating basis, thereby minimizing administrative problems. Considering that each teacher would teach 80% of the time, with take-home pay of about 90% (see below) this should prove highly attractive for teachers

wishing to engage in professional and academic growth, hobbies, writing, curriculum committee work, limited travel, phasing-down to retirement, etc.

Using the second definition of a teaching assignment, job-sharing could apply across schools where the availability of options is threatened by low enrolments and teacher positions are thereby threatened. The use of a team of teachers to provide low-enrolment options on a rotation basis, with some members of the team travelling among schools, would meet this need provided administrative problems can be resolved.

The use of a special form of the 2:1 plan in secondary schools would enable teachers to work one semester and be free one. Or a school could program certain subjects in one semester only, as is already done in some jurisdictions.

An extreme application of the principle would provide for an individual having one year in, say, five years free, with salary provisions adjusted to pay equal amounts in the total number of years in the cycle, thereby maximizing tax advantages.

Some Special Considerations

- (A) The most important provision would be to guarantee that the quality of instruction did not suffer. Fortunately, the past decade or so has seen school systems gain considerable experience in team teaching and planning, which could be used to advantage.
- (B) Teachers volunteering for such a scheme would need a guarantee that participation made them no more vulnerable than their peers in further staff reductions.
- (C) Teachers' superannuation positions would have to be protected. At present teachers may buy credit for certain non-teaching periods; the application of this policy to job-sharing situations requires clarification or policy.

- (D) There would be significant tax benefits. In the 5:4 model referred to, if the teacher worked 80% of the regular period at a pro-rated salary, his take-home pay would be in excess of 90% of his previous take-home pay. Two reasons account for this: (1) The 20% of salary at the top of the teacher pay scale is subject to maximum tax percentages. In 1978, for amounts above \$16,000 of taxable income the federal plus provincial rate is less than 50% (39% + 9.2%). For amounts above \$28,000 the rate is about 55%. (2) Since the teacher's share of superannuation is 7% of gross salary, a savings would be realized of 7% on the 20% of salary involved.
- (E) "Free" times provided by the plan would provide not only opportunities for the individual to pursue personal interests, but would also enable him to engage more readily in professional development and graduate programs.
- (F) The plan at the secondary level would enable a board to retain thin options and teachers to practise their expertise.
- (G) The scheme would provide flexible and varied opportunities for practice-teaching by teachers' college students, and the team teaching feature of the plan would also provide the best possible induction for beginning teachers.

(4) Lincoln County Board of Education (Brief #170) - Abstract

This brief outlines in detail the policies indicated below, plus some specific proposals for actions which can be taken. Copies of the brief can be secured through the Ministry of Education.

Public Elementary Schools

We expect that most of the reduction in staff will be accomplished by attrition. Another strategy that we are examining is short-term transfer from elementary to secondary schools. A policy has been developed to facilitate such a transfer. It is hoped, as the teachers return to the elementary panel in two or more years, that the return will offset the secondary enrolment decline when teaching staff is reduced.

Secondary Schools

The only experience we have had in the secondary panel regarding declining enrolment is in regard to what we call transferable teachers (i.e., involuntary transfers). We have not had to declare any teacher surplus or redundant but we have had to balance out declining enrolment schools with growing schools.

We wish we could be as optimistic about the solutions to the problems we will face in the secondary schools as we are about elementary school problems. Obviously the attrition rate is lower and the subject specialization is more of a restriction in placing teachers. As the secondary school enrolments become smaller, we will have to examine some or all of the possible options.

(5) OSSTF (Brief #6) - Abstract

- (A) School boards and their teachers should attempt to develop co-operatively procedures dealing with staffing, transfer and temporary assignments.
- (B) Each district should establish a pool of the names of competent released teachers and when teaching positions open within the district teachers from this pool should be given first opportunity for employment on the basis of experience.
- (C) A study should be made of extending the concept of a district pool to that of a regional pool.
- (D) The Minister of Education, in cooperation with the teachers' federations and the trustees' organizations, should establish a provincial teacher transfer-exchange program between boards, operated on a voluntary basis.
- (E) The government should be urged to provide special incentives for school boards which cooperate with other boards in transfer programs of competent teachers.
- (F) Boards of education should increase the availability of part-time teaching positions, sabbaticals and education improvement leaves and leaves-of-absence.
- (G) Boards of education should be encouraged to develop processes that facilitate any necessary retraining of professional staff to meet changing needs.
- (H) A joint effort should be made by the major partners in education to provide opportunities for teachers to expand subject fields to meet changing demands.
- (I) The average class size should be adjusted so that the teacher can spend more time with the individual student.

(6) Thunder Bay, Job-Sharing Plan

It was reported that some high school teachers in Thunder Bay may soon get four years' salary spread over five years and take the fifth year off. Education officials elsewhere in Ontario say the idea could keep more teachers employed. Thunder Bay teachers and their board of education are still working on details of the plan, aimed at cutting a teacher surplus.

(7) OSSTF - Frontenac County (Brief #194) - Abstract

(A) Four Examples of Education Services Presently in Operation

Work Experience Program For Students With Poor Inter-Personal Relationships and Low Skills

There are a significant number of Level 2 (Basic Education) and Level 3 (Occupational) students who leave school when they reach age 16. Many of them are unable to obtain jobs and therefore remain at home and are idle in the community. This program is designed to bridge the gap between school and a full-time job.

Metrication and Alcan

The apprentices of Alcan, one of the largest local employers, are presently attending a local high school for 2 hours each week for 12 weeks taking a course on metrication.

Trades Training

When student selection of the courses offered in air conditioning and refrigeration in a local high school dropped substantially, the technical director arranged a meeting with a senior official of Manpower in Kingston. As a result of this meeting and collaboration with St. Lawrence College of Applied Arts and Technology, it was agreed that a program for air conditioning and refrigeration technicians could be given, using existing facilities and the teacher. This resulted in a program being maintained for secondary school students and a new program started for adults.

The Secondary School And Senior Citizens

Our community, like most in this province, has a rapidly expanding group of senior citizens. We believe the secondary school can and should play an important role in the enrichment of the daily lives of

our senior citizens. Many schools are now making use of the availability of senior citizens to provide our students with all kinds of assistance.

(B) Some Alternatives for the Schools and the Community

Work Force Preparation

Our education system must become more responsive to the realities of our emerging profile of economic growth and our future labour requirements. The teachers must know the community and try to anticipate the needs of business and industry.

Job Expectations

The expectations of most young job seekers and their parents remains high. We must train our young citizens to use their talents and abilities under a variety of social and economic circumstances. Youth responds to a challenge. With minor adjustments to existing relationships between business education and technical teachers we could produce a number of small business enterprises which could be practical and efficient.

Merchandising of Empty Seats

In many parts of the world there is a desperate shortage of secondary school facilities and teachers. This community has 40 to 50 students from Hong Kong, Malaysia, South America and the Middle East who travel here, pay for food, lodging and pay full tuition fees to attend secondary school.

Education for Leisure Time and New Courses

Teachers must be more sensitive to the needs of the community and the changing work week. More and more people in our community are working fewer hours and looking for alternative uses of their leisure

time. Schools can and should offer a variety of opportunities for these people.

Early Retirement - Educational and Economic Returns

In studying a number of "retirement lists" it has become quite evident that the majority of teachers who will be retiring in the next 15 years from our secondary schools will have to do so at the mandatory retirement age with less than a maximum pension. We have devised a system to allow older teachers to retire early without a major financial loss. Teachers who have reached the 90 factor but who do not have the years of experience to receive maximum pension should have the opportunity to retire early. By hiring an inexperienced teacher, the salary difference between the two teachers could be used to provide for the early retirement without loss of benefit to the experienced teacher or cost to the board.

1. At the County Level

- (a) Part of the salary difference could be invested in an annuity which would pay the retiring teacher the maximum pension which he would collect if he stayed until age 65.
- (b) The board could pay the retiring teacher directly from the "saving".

2. At the Provincial Level

Another approach would be to charge the board the premium shortage due to the early retirement and at the same time collect the extra money required to give the early retiring teacher a maximum pension in the 5 year early retirement period.

Implications of Declining School Enrolments for School Accommodation

Every school board holds in trust great public assets in the form of real estate. In the years of school system expansion these assets were increased each year. It is one of the advantages of declining school enrolments that expenditures for further real-property accumulations have been greatly reduced. Table 9.1 provides a brief history of those expenditures, 1967 to 1977. Many boards now have surplus properties that, in the interests of efficiency, must be disposed of or put to uses for which they were not originally intended. The effective exploitation of these properties is emerging as a major challenge to school boards and administrators and to community planners.

The redeployment or disposal of these surplus assets ought not to be rushed. The declaration of being surplus for each piece of property should be carefully assessed and all propositions for redeployment or disposal should be the subject of attention from education and community planners. By way of cultivating the appropriate attitude toward the future use of these properties, attention should be paid to several aspects of the history of school property acquisition.

During the years of net acquisitions of real estate, the fact that it is a long-lived asset justified the assumption of public debt, both local and provincial. While debt was being paid off faster than the value of properties deteriorated, education expenditures were in fact lower than they were perceived to be, i.e., a part of those expenditures were being transformed into capital assets. While current education operations are using the real properties paid for in previous years, current education expenditures are higher than they appear to be.

Had the period of expansion been followed by a long period of stable enrolments, the reductions in school costs associated with the use of real property already paid for could be considered the rent and

TABLE 9.1
ONTARIO SCHOOL BUILDING CONSTRUCTION
NEW SCHOOLS AND ADDITIONS, 1967-1976/77

YEAR ¹	ELEMENTARY			SECONDARY			TOTAL		
	Enrolment ² Gain or Loss(-)	No. of Projects Completed ³	Total Cost at Tender Stage	Enrolment ² Gain or Loss(-)	No. of Projects Completed ³	Total Cost at Tender Stage	Enrolment ² Gain or Loss(-)	No. of Projects Completed ³	Total Cost at Tender Stage
			\$,000's			\$,000's			\$,000's
1967	40,181	330	72,800	27,710	108	40,750	67,891	438	113,550
1968	25,538	335	77,742	37,071	56	28,457	62,609	391	106,199
1969	25,527	333	67,374	29,872	56	26,472	55,399	389	93,846
1970	9,371	243	74,074	26,234	65	35,329	35,605	308	109,403
1971	- 8,648	215	60,486	17,607	81	28,785	8,959	296	89,271
1972	-11,739	221	46,453	8,493	67	27,287	- 3,246	288	73,740
1973-74 ⁽⁴⁾	-22,216	226	80,721	2,712	64	12,670	- 19,504	290	49,374
1974-75	-18,046	110	57,730	3,925	31	8,789	- 14,121	141	37,653
1975-76	-15,361	163	88,735	15,510	54	7,404	149	217	43,188
1976-77	-29,393	108	72,554	7,895	25	6,332	- 21,498	133	31,397
TOTAL	- 4,786	2,284	525,346	177,029	607	222,275	172,243	2,891	747,621
			923,873			824,746			1,748,619

1) Calendar year base until 1972; fiscal year since that date (April 1 to March 31)

2) September 30 of year

3) Building projects are counted in year of completion

4) Not comparable; contains data for Jan. 1, 1972 to March 31, 1973

Source: Reports of the Minister of Education

interest accruing to earlier investments. That reduction in costs would be the returns that taxpayers today were entitled to on their earlier investments. As some of that real property now becomes surplus, returns to earlier investments can be realized in the form of proceeds from disposal and/or alternative public uses.

I can imagine few problems more complex than the equity issues associated with the apportioning of the proceeds of disposal or the benefits of alternative community use. This complexity originates with the board-provincial partnership in the financing of the acquisition of those properties. It is exacerbated by the fact that the participation in that partnership has not been constant over time or across the boards. The complexity is raised to a higher level by the fact that the properties are not distributed evenly among the municipalities in a board.

To illustrate the equity problems that are emerging, suppose that two boards are each about to sell a surplus school property for \$1,000,000. The first board acquired its property on a 75% provincial and 25% local financial arrangement. The second board acquired its property on a 25% provincial and 75% local financial arrangement. If the province did not require the return of a share of the proceeds, the first board would realize a \$750,000 windfall, the second would realize only a \$250,000 windfall. Those boards with no surplus properties would receive no windfall. In the interest of equity, the province can demand a "negative grant" from the first board of \$750,000 and from the second of \$250,000. Of course, both boards, especially the first, would now be encouraged to put the surplus properties to some marginal use. In effect, we would have solved the equity problem at the expense of efficient use of the property.

Let us assume now that the first of those boards (a county board) elects to put its property to alternative community use and that the province does not require reimbursement in this case. The property serves well in this capacity, i.e., it serves well a community function for one municipality. But it is now apparent that the county is a "community of many communities" for school services, but not for other

services. The municipalities are then quite separate. Community services for one are not the community services of another. Unless the board happens to have comparable properties to put to community use in each municipality, the problem of inter-municipality equity arises. Another problem may be added to this example: if a property is put to community use and the related revenues are not proportionate to the market value of the use of that property, inefficient use is being made of a public asset.

It must be conceded that even an approximation to perfect equity in the disposal of, or alternative use of these properties is not feasible. But it should be pointed out that reorganization and expansion of the system have also sometimes been the cause of school properties becoming surplus, as has community growth and land-use changes. Equity is not a problem that originates only with declining enrolments. It is also the case that there is not going to be a sudden surge of school properties to be disposed of or redeployed due to declining enrolments.

The challenges in finding equitable and efficient use of surplus school properties are not new, but they will be a more significant part of the political and administrative problems of the boards in the immediate future under conditions of declining enrolments. The real properties of a board are best viewed as a portfolio of capital assets to be managed in the public interest by the board. As any other portfolio manager, the board must from time to time change the assets in its portfolio and even trade off some of those capital assets to realize cash benefits. In the management of its portfolio, the board will have to seek maximum utility of those assets while conforming to some remarkable constraints associated with the requirements of equity and with the past and present regulations pertaining to the finance of school property acquisitions.

Several of the studies and reports done for the Commission addressed themselves to one or another aspect of physical accommodation and declining enrolment. Alternative uses for surplus properties was one of the most frequently recurring themes in the briefs. As one might expect, these

highly visible assets, when taken out of use, are the most obvious and persistent reminders of the changing scale of operations in public education.

I call the reader's attention especially to one of the above mentioned studies, School Facilities, the Community, and Declining Enrolment--A Handbook of Suggestions for Ontario Boards of Education, (Information Bulletin #1, by Howard Henderson, et al., prepared for the Commission on Declining School Enrolments in Ontario, February, 1978). It is an informative presentation of the data pertaining to past and present levels of school property surpluses and of the recent history of disposal and redeployment of those properties. Of even more importance, however, it also contains an excellent introduction to the strategies and procedures now being used (and in some instances currently being considered) for dealing with surplus properties. The authors leave their readers with few doubts that the management of these properties is a challenge specific to the boards and their administrators, and some of the related problems are peculiar to a single board, or a few boards at a given time. It is also apparent that the responses of boards to these problems reflect their own managerial and policy styles and even reflect the personalities of their board members and administrators.

I don't see that the problems of management of these board assets can be handled better anywhere else than in the offices of the boards. This statement may appear to be tantamount to a recommendation of retreat from direct concern for these problems by the Ministry of Education. However, the appreciation of the knowledge about local conditions and the needs of a board on the part of trustees and administrators that it reflects did not motivate me to change the wording of the recommendation in the Second Interim Report that was repeated in Chapter 7 of this report:

Take steps to increase the Ministry's control over certain finance-related decisions, including the use and sale of school buildings...

That recommendation stands. But "control over" board decisions does not mean substituting Ministry decisions for board decisions. It means

constructing the regulations (and legislation, if necessary) that will protect the interests of provincial taxpayers in the decisions made by individual boards and that will promote equity in the effects of these decisions on ratepayers in different board jurisdictions and in the different communities in one board. It also means promoting information and knowledge (including some skills and experiences) that will enable boards to conduct their stewardships of public properties more expertly.

This business of managing the capital assets of the boards is only a particular set of those problems I was referring to in my first recommendation regarding administration in Chapter 4 of the Second Interim Report:

Initiate immediately a sustained effort to promote decentralized political solutions to emerging local and provincial problems associated with declining enrolments, in particular, problems of coordination and cooperation. Begin the organization of many sessions for discussion, negotiation and trade-offs to deal with specific inter-board and inter-interest group issues. Encourage board level administrators and Ministry of Education officials to take the initiative in promoting these activities.

I know of no other way to promote the better community use of school properties, or of disposal of school properties in the best interest of communities, than to encourage discussions and negotiation among boards, and between boards and other community service agencies. But it is vital that the Ministry make clear to all parties the constraints that operate on them when they make decisions. It should be made clear that the preference is for school buildings and sites to be converted to other community uses, and only from time to time to be sold. It should be emphasized that the renting, trading and sale of sites among boards, especially between geographically overlapping separate and public boards, is an obvious strategy for maximizing the public interest in disposing of surplus properties. The Ministry will no doubt have to play the brokering role in these transactions, and also the role of an interested party to ensure that a property exchange that would be in the interest of taxpayers does not founder because of complexities it raises in our capital-grant structure. It should also be emphasized that, in the interest of efficiency in the use of public properties, community and public agencies will be expected to pay for the use of surplus school properties.

In the Second Interim Report (Section B, Chapter 1), I recommended that our first planning objective in the decade ahead be the reassessment of the structure (meaning the missions and organizational relations) of the school system. I do not want the schools to take on new missions without such planning, and I do not want them to take on new functions as an automatic response to declining enrolments. For this reason, I recommended that we not alter significantly the structure of the school system while we deal with these immediate problems of accommodating to sharply declining enrolments and increasing financial pressures.

This reluctance to see the school boards move precipitously in assuming new public service roles is reason enough to counsel caution in redeployment of school properties to community service functions. Our attitude should be that it is appropriate to put a surplus school property to alternative community use, but it is not appropriate to put it to alternative community use just because it is surplus.

Moreover, the possibility that in a few years we will have redefined the missions of the schools and the service boundaries between school boards and other public service agencies (including the offices and agencies of several Ministries) is an argument for postponing the disposal of school properties. I have already emphasized in the Second Interim Report that in some instances responsible stewardship dictates the disposal of school properties. I am certainly not suggesting the hoarding of real properties by boards when the future need for that property is remote, and I am not recommending real estate speculation as an appropriate activity of school boards. But I am counselling a careful, unhurried approach to the divestiture of properties by the boards. When the decision to dispose is marginal, it should in most cases be postponed.

I come now to two major recommendations concerning school properties. In the Second Interim Report I recommended that the Ministry continue for 1978 and 1979 the moratorium in the application of the negative grant associated with the disposal of school facilities (Section B, Chapter 7). The conditions associated with this moratorium allow a board to dispose of real capital assets and, with Ministry approval, apply the proceeds to the purchase of other properties for board use

without the negative grant applying. This arrangement is conducive to efficient management of boards' capital portfolios. In the interest of more efficient portfolio management I recommend that:

Every board be given the authority to dispose of surplus properties and to apply the proceeds immediately to the purchase of other real properties, or to put the proceeds in an escrow account for a period up to five years without the negative grant being imposed. At any time during the five years the board should be allowed to use those funds to purchase new properties, the acquisition of which has been approved by the Ministry. Income from the funds in escrow should be apportioned between the board and the Ministry in the same proportion as the proceeds from the disposal would have been apportioned.

The second major recommendation is intended to increase the province's role in the planning of use of school properties and to reduce the school-related acquisition of public debt. I recommend:

The Ministry of Education pay in full, from current revenue, the costs of all new sites, buildings and additions, including replacements, approved by the Minister, and hence own them outright. This provision should be made effective as soon as possible and made retroactive to all real property-related expenditures approved after December 31, 1977.

This recommendation is a response to the opportunity for financial conservatism presented by declining enrolments. It is not a new idea, of course, and is in accord with the views expressed by the late Dr. J.G. Althouse almost 40 years ago.

In addition to those two major recommendations, I offer these as responses to present conditions. I recommend:

- (i) A two-year moratorium be placed on building new secondary school accommodations and excess demand for places be accommodated over the short-run by busing.
- (ii) At least 50% of the capital budget be directed to renovation, and these capital funds be paid to the boards on the same basis (i.e., in the same ratio of provincial expenditures to local expenditures) as operating grants.
- (iii) Capital expenditures continue to be monitored by the Ministry through regional offices.

- (iv) Where surplus capacity of one board can meet the requirements of a neighbouring or overlapping board, the services of the Ministry be offered in negotiating the arrangements and terms, and where it is in the public interest, to mandate these arrangements and terms. The Minister should, if necessary, indicate that Ministerial approval of the intended property transactions of both boards is contingent upon such negotiations serving the interests of local and provincial taxpayers.
- (v) All boards be requested to prepare for public distribution a statement of their policies and procedures regarding transportation of pupils, possible or anticipated school and classroom closings and the use of space no longer needed for instructional purposes (as discussed in the Second Interim Report and in Information Bulletin #1).

As a final comment, it is appropriate to observe that one of the potential economies from declining enrolments is the proceeds from disposal or the benefits from redeployment of surplus school properties. The realization and maximization of those economies will require a great deal of planning and cooperation on the part of the boards, the Ministry, the municipalities and community service agencies.

Chapter 10

Implications of Declining School Enrolments for School Finance

Few exercises in adult education can be more effective than that to which a Commissioner is subjected in the course of his work. I regret only that it is too expensive an approach to learning to become part of everyone's education. As an over-age student of school and society setting about to study the effects upon our school system of the decreasing infant and school-age population, I found the lessons that made the deepest impression upon me were those on the economy of this province and the finance of our school system.

I revealed some of my predilections too early to be able to deny now that I have misgivings about the diminishing scale of operations of the school system whose growth I watched with such satisfaction for so many years. But I have learned enough in the past 14 months to be convinced that declining enrolments present an unprecedented opportunity for economies in the conduct of our public affairs. We were justified in our pride in the great school system we built to accommodate the ever-larger cohorts coming into the schools in the 1950's and 1960's. We are equally justified in expressing some satisfaction and relief at the reduced financial pressures associated with the smaller cohorts that have been coming into the schools in this decade. Some of the savings, no doubt, will accrue to us in any event, but I am convinced they will come sooner and be greater if we make the effort to plan well the new scale of operations of our school system.

In arriving at my present perception of the problems and opportunities facing education finance, I acknowledge that I have been more than a little affected by a number of studies, done for the Commission, that forced my attention to several aspects of public finance, school finance and the choices before us. I must also acknowledge that the job of familiarizing myself with many aspects of the recent history of education finance was hastened by the 7 reports of the Committee on the Costs of Education, of which J.R. McCarthy is executive director.

The studies that were done for the Commission and that have contributed so much to my present position were:

- David K. Foot, Resources and Constraints: Public Education and the Economic Environment in Ontario 1978-1987.
- Richard M. Bird, Financing Education in Ontario; Issues and Choices.
- D.A. Dawson, Economies of Scale and Cost Quality Relationships in Elementary and Secondary Schools: A Survey.
- David Stager, Elementary and Secondary School Teachers' Salaries in Ontario, 1900 to 1975.
- John B. Kervin, Declining Enrolments and Teacher-Board Negotiations: Bargaining Conditions of Employment.
- Peter J. Atherton, Declining Enrolment and the Aging Teaching Force.
- Richard M. Bird and N. Enid Slack, Property Tax Reform and Educational Finance.
- E. Brock Rideout, Alternatives for Educational Finance Within the Established Parameters.
- Peter J. Atherton and J. Chalcraft, Comparisons and Projections: The Teachers' Superannuation Fund in Relation to Public Sector Pension Plans.
- David M. Cameron, Declining Enrolment and the Financing of Education in Ontario.
- E. Brock Rideout, Abstracts of Reports on Costs of Education, Financial Aspects of Declining Enrolment, and of Current Research into Problems of Declining Enrolment.

I do not expect the authors of those reports to be entirely satisfied with the consequences of their teaching efforts. In case the effects on me were very different from what they intended, I will limit my comments about those reports to the observation that each of them was remarkably effective at focusing my attention on the particulars and the complexities of the aspects of education finance and public finance that I asked their authors to explain. All those reports are now published, and I'm sure one need not agree with my present views on education and public finance to appreciate them.

In discussions with members of the Commission's Task Force on Finance, it was impressed upon me early that I must come to a position

on two very important matters, one quite technical and the other a question of public policy. The first pertained to economies-of-scale, of whether or not the most extreme views expressed on the increasing unit costs to be expected with declining enrolments were valid, in which case we could expect little or nothing in the way of economies from declining enrolments. The second pertained to whether the emerging problems of education finance could be dealt with to our satisfaction via adjustments in the grants system that has been evolving in this province since 1964, or could be dealt with satisfactorily only after that system had been replaced.

In the first matter, we must go back to the decades when policies for consolidation and amalgamation of schools and boards, and for the substitution of great fleets of yellow buses for scattered small school operations, were justified by reference to studies arguing for economies-of-scale. Countless contract studies and hosts of master's and doctoral theses in education, plus some in economics and management sciences, purported to show that larger school and board operations afforded lower unit costs while holding constant the cost of quality, or higher quality education.

Much of the history of the increasing scale of operations has coincided with decades of remarkable increases in education costs. If there are powerful economies-of-scale in education, then it must be assumed that the increases in unit costs (in real dollars) associated with expansion of the system in recent decades reflected either a policy of raising per pupil expenditures to improve quality or the improved market position of teachers. More importantly, declining enrolments would now be expected to bring about markedly higher unit costs.

Indeed, if one is convinced that there are strong economies-of-scale in our system of education, there is an ominous conclusion to be drawn from observations about expenditure-enrolment relations that were registered so often in the briefs to this Commission. The briefs said that the many "fixed" costs in education mitigate against significant reductions in the real (non-inflationary)

costs of education under conditions of declining enrolment. The ominous conclusion is that economies associated with declining enrolments may be very slow in coming, or never be realized at all. That is not my conclusion, however.

The conclusion I have drawn from Donald Dawson's study (that I consider buttressed by the work of E. Brock Rideout and others as reported in Educational, Social and Financial Implications to School Boards of Declining Enrolments¹) is that economies-of-scale, though of significant magnitudes, are not now a matter of grave concern to us in Ontario. Hickcox has observed that "school systems in Ontario for the most part are large, as a result of the reorganization of 1969. In no other jurisdiction in North America are there as many systems with pupil populations of more than 20,000" (Chapter 5, First Interim Report). It appears we will not suffer greatly from economies-of-scale problems at the board level. And large boards may be expected, in time, to reorganize schools to cope with the diseconomies-of-scale at the school level.

I do not dismiss the probability that some of the hoped-for savings from declining enrolments will never be realized because of diseconomies of small scale. But at the same time I regard most of the "fixed costs" arguments for accepting higher real unit-costs with declining enrolments as valid for only a few years. In the Second Interim Report I recommended, and will again below, that some financial aid be made through the grants to boards with high rates of decline, but that aid is to be temporary. A part of the savings from declining enrolments are in some cases to be postponed, but not foregone.

The reorganization of schools to provide efficient service to a smaller number of pupils is an administrative challenge and is a job that will take time. But it will be done. At several points in this and in my earlier reports I have made reference to our large cadre of well trained, experienced administrators. They will play an important role in the reorganization of the school systems, as they always have. There should be no frantic rush to reduce the numbers of administrators

¹Rideout et al, Ministry of Education Research Project, 1977.

in the interest of economy. It may be that some boards have an administrative establishment intended for a much larger operation than they now have. They may quite appropriately plan to reduce it by 10%, 20% or any other portion. But they should approach that target slowly. It is not some special concern for administrators that causes me to recommend this, but rather the realization of a great need for administrators to deal with the disruptions of declining enrolment. I am showing here a concern for getting our money's worth from them. They have cost us a great deal and if we use them well now it will almost certainly turn out that the money was well spent.

The second matter that needed a position (whether we deal with education finance via adjustments in the present grants system or replace that system) is one on which I postponed judgement to the latest possible date. My thinking was much influenced by three of the above mentioned studies: Richard M. Bird, Financing Education in Ontario: Issues and Choices, D.M. Cameron, Declining Enrolment and the Financing of Education in Ontario, and E. Brock Rideout, Alternatives for Educational Finance Within the Established Parameters.

In the interest of brevity, and at the risk of oversimplification, I will sum up the arguments of both Bird and Cameron this way: with the reorganization of school boards in 1969 we imposed upon ourselves an organization of school systems that are (especially in their financial capacities) in very many respects more nearly the agencies of the central government than they are the representative bodies of local communities. They are too large and too inclusive to serve effectively as the locations of political processes to resolve the competing preferences of any given communities (a complaint voiced repeatedly during our public hearings). Moreover, their function as the provider of a single, specialized public service means that they cannot handle the political task of resolving the competing financial claims of education vis-a-vis other local (municipal) services. In light of the increasing difficulties associated with maintaining the local share in the provincial-local partnership in the finance of education, we would be well advised to carry the process of consolidation, amalgamation and centralization to completion. We should make education finance a provincial matter, so

these authors argue. The problems associated with maintaining the local contribution to the financial partnership are in large measure due to the difficulties of raising local tax revenues at the rate of inflation and to the unpopularity and imperfections of the property tax.

I hasten to qualify this summary by adding that Bird and Cameron present cases for provincialization of education finance that are quite different from one another. In each case the recommendation is conditional, and only one of several feasible approaches suggested.

I will summarize Rideout's argument in equally cavalier fashion. The grants system that we have been developing since 1964, and the reorganization of school systems in 1969, have effectively served the objectives of providing a high quality education service across the province and of equalizing average per-pupil expenditures across the boards. Equity was the prime motivation in constructing our grants system and in reorganizing the boards. Horizontal equity (equal treatment of equals) has been effectively served by closing the gaps that characterized inter-board differences in average per-pupil expenditures. Vertical equity (concessions to the special problems of some students and the conditions of operation of some boards) has been effectively served through the incorporation of "weighting factors" in the grants scheme. These factors compensate the boards for the financial problems associated with serving disproportionately large numbers of certain types of students, and for certain adverse conditions of operation. Our present system is flexible, adjustments can be made to accommodate changing conditions, new perceptions of equity and any desired apportionment of the provincial-local financial partnership.

Few people are particularly enamoured of our system of education finance. There are many things wrong with it. On the other hand, it works. It has enabled us to underwrite the expansion of education operations while serving our current equity objectives. I have found it difficult to choose between recommending adjustments in the existing system and replacing the existing system with a straight provincial school finance system. In the major recommendations I offer below, it will be evident that I have come down on the side of keeping what we

have. But I have not done it clearly and unequivocally. I have compromised and recommended an important structural change in our provincial-local financial partnership.

Before moving to those recommendations, I want to offer a very brief quantitative review of our publicly-supported school system. Table 10.1 refers to the structure of revenue sources for fiscal (calendar) year 1975 (though the local taxation component has been growing since then, the structure has not altered markedly). Local taxes and provincial grants amount to nearly 97% of elementary and secondary grants (the item Transfers from Other Boards should be read as originating as local taxation and provincial grants). The important difference across the three classes of schools is the local taxation-provincial grant ratios. Separate schools received 14.36% of their revenues from local taxation, public schools received 45.09%. This difference reflects the smaller taxation base available to separate schools. The 81.29% of separate school revenues originating as provincial grants and the 52.01% of public school revenues originating as grants demonstrates the inverse relationship between assessment resources available to boards and grants received.

Table 10.2 represents the structure of board expenditures. The structure is markedly similar across the three classes of schools. The table also reflects the labour intensive character of public education. Between 54% (separate schools) and 57% (public schools) of the total of board expenditures went directly to instruction related salaries. Wages are also an important component of most of the other expenditure categories except Supplies and Other, Capital Expenditure from Revenue and Debt Charges. Unquestionably, what we are paying through our education expenditures is mainly wages and salaries of teachers and others who work in that industry. Reduced expenditures plainly mean reduced employment in the field or employment at reduced levels of pay.

Table 10.3 presents most of the same information from Tables 10.1 and 10.2 on a per pupil basis. The near equality between the total per pupil expenditures for public (\$1,185) and separate school (\$1,173)

TABLE 10.1
ONTARIO SCHOOL BOARD REVENUES,
ANALYSIS OF SCHOOL BOARD REVENUES, 1975 (Calendar Year)

ITEM & SOURCE	ELEMENTARY SCHOOLS						SECONDARY SCHOOLS		GRAND TOTAL	
	PUBLIC		SEPARATE		TOTAL		AMOUNT	%	AMOUNT	%
	AMOUNT	%	AMOUNT	%	AMOUNT	%				
LOCAL TAXATION*	(\$,000's)		(\$,000's)		(\$,000's)		(\$,000's)		(\$,000's)	
PROVINCIAL GOVERNMENT - GRANTS	513,661	45.09	72,046	14.36	585,707	35.69	437,299	38.91	1,023,006	37.00
PROVINCIAL GOVERNMENT - OTHER PAYMENTS	592,514	52.01	407,851	81.29	1,000,365	60.96	628,345	55.91	1,628,710	58.91
FEDERAL GOVERNMENT	1,746	0.15	2,196	0.44	3,942	0.24	1,241	0.11	5,183	0.19
TRANSFERS FROM OTHER BOARDS	4,600	0.40	2,507	0.50	7,107	0.43	5,482	0.49	12,589	0.45
PAYMENTS FROM INDIVIDUALS	4,783	0.42	2,595	0.52	7,378	0.45	19,385	1.72	26,763	0.97
SALE OF PROPERTY AND INSURANCE PROCEEDS	317	0.03	220	0.04	537	0.03	6,097	0.54	6,634	0.24
OTHER REVENUE	3,958	0.35	1,088	0.22	5,046	0.31	3,227	0.29	8,273	0.30
TRANSFERS FROM RESERVES AND OTHER FUNDS	6,378	0.56	2,608	0.52	8,986	0.55	12,442	1.11	21,428	0.77
	11,332	0.99	10,602	2.11	21,934	1.34	10,335	0.92	32,269	1.17
TOTAL REVENUE	1,139,289	100	501,713	100	1,641,002	100	1,123,853	100	2,764,855	100

* Represents the portion of total expenditure required to be raised by local taxation.

Source: Minister's Report (1976), p. 130.

TABLE 10.2

ONTARIO SCHOOL BOARD EXPENDITURES,
ANALYSIS OF SCHOOL BOARD EXPENDITURES, 1975 (Calendar Year)

I T E M	PUBLIC SCHOOLS		ROMAN CATHOLIC S.S.		TOTAL ELEMENTARY SCHOOLS		SECONDARY SCHOOLS		GRAND TOTAL	
	AMOUNT	%	AMOUNT	%	AMOUNT	%	AMOUNT	%	AMOUNT	%
BUSINESS ADMINISTRATION SERVICES:	(\$,000's)		(\$,000's)		(\$,000's)		(\$,000's)		(\$,000's)	
(1) COMPUTER	22,475	2.01	14,383	2.95	36,858	2.30	23,177	2.16	60,035	2.24
(2) EDUCATIONAL	29,500	2.64	12,006	2.46	41,506	2.59	31,663	2.95	73,169	2.73
(3) ATT. HEALTH, FOOD INSTRUCTION, DAY SCHOOL	2,328	0.21	774	0.16	3,102	0.19	4,963	0.46	8,065	0.30
(1) SALARIES & BENEFITS	24,464	2.19	10,657	2.18	35,121	2.19	19,558	1.82	54,679	2.04
(2) SUPPLIES & OTHER	2,708	0.24	575	0.12	3,283	0.21	7,142	0.67	10,425	0.39
PLANT OPERATION & MAINTENANCE	734,356	65.76	308,566	63.29	1,042,922	65.01	736,373	68.58	1,779,295	66.44
TRANSPORTATION	638,226	57.15	262,987	53.94	901,213	56.18	628,184	58.50	1,529,397	57.11
CAP. EXPENDITURES FROM REVENUE	96,130	8.61	45,579	9.35	141,709	8.83	108,189	10.08	249,898	9.33
DEBT CHARGES**	152,194	13.63	65,851	13.51	218,045	13.59	139,086	12.95	357,131	13.34
OTHER OPERATING	46,047	4.12	23,609	4.84	69,656	4.34	37,075	3.45	106,731	3.98
	37,627	3.37	17,805	3.65	55,432	3.46	28,888	2.69	84,320	3.15
	90,737	8.13	43,031	8.83	133,768	8.34	73,254	6.82	207,022	7.73
	3,724	0.33	2,292	0.47	6,016	0.37	4,250	0.40	10,266	0.38
NET DAY SCHOOL EXPENDITURES	1,116,660	100	487,543	100	1,604,203	100	1,073,766	100	2,677,969	100
NET DAY SCHOOL	1,116,660	98.01	487,543	97.18	1,604,203	97.76	1,073,766	95.54	2,677,969	96.86
ADULT EDUCATION	235	0.02	650	0.13	885	0.05	12,912	1.15	13,797	0.50
TRANSFERS TO OTHER BOARDS	3,396	0.30	2,391	0.48	5,787	0.35	18,602	1.66	24,389	0.88
NON-OPERATING EXPENDITURES	3,059	0.27	453	0.09	3,512	0.21	2,432	0.22	5,944	0.21
TAX WRITE-OFFS & REVISIONS	6,740	0.59	408	0.08	7,148	0.44	5,417	0.48	12,565	0.45
RESERVES & OTHER FUNDS	9,199	0.81	10,268	2.05	19,467	1.19	10,724	0.95	30,191	1.09
TOTAL EXPENDITURE	1,139,289	100	501,713	100	1,641,002	100	1,123,853*	100	2,764,855	100

* Includes revenue and expenditure in respect of schools for trainable retarded pupils.

** Includes interest on short-term borrowings for capital purposes.
Source: Ibid.

TABLE 10.3

ONTARIO SCHOOL BOARD REVENUES & EXPENDITURES ANALYSIS
OF MAJOR ITEMS ON A PER STUDENT BASIS, 1975
(enrolment on September 30, 1975; revenues & expenditures on a calendar year)

MAJOR ITEMS	CATEGORY	ELEMENTARY SCHOOLS			SECONDARY SCHOOLS	ALL SCHOOLS
		PUBLIC	SEPARATE	ALL ELEMENTARY SCHOOLS		
REVENUES (total amounts in thousands of dollars)						
LOCAL TAXATION	TOTAL AMOUNT	513,661	72,046	585,707	437,299	1,023,006
	PER STUDENT	534	168	422	723	513
PROVINCIAL GOVERNMENT GRANTS	TOTAL AMOUNT	592,514	407,851	1,000,365	628,345	1,628,710
	PER STUDENT	616	953	720	1,038	817
OTHER	TOTAL AMOUNT	33,114	21,816	54,930	58,209	113,139
	PER STUDENT	34	51	40	96	57
GRAND TOTAL	TOTAL AMOUNT	1,139,289	501,713	1,641,002	1,123,853	2,764,855
	PER STUDENT	1,185	1,173	1,181	1,857	1,386
EXPENDITURES (total amounts in thousands of dollars)						
BUSINESS ADMINISTRATION	TOTAL AMOUNT	22,475	14,383	36,858	23,177	60,035
	PER STUDENT	23	34	27	38	30
EDUCATIONAL SERVICES	TOTAL AMOUNT	24,464	10,657	35,121	19,558	54,679
	PER STUDENT	25	25	25	32	27
INSTRUCTIONAL SALARIES & BENEFITS	TOTAL AMOUNT	638,226	262,987	901,213	628,184	1,529,397
	PER STUDENT	664	615	649	1,038	767
INSTRUCTIONAL SUPPLIES	TOTAL AMOUNT	96,130	45,579	141,709	108,189	249,898
	PER STUDENT	100	107	102	179	125
PLANT OPERATION	TOTAL AMOUNT	152,194	65,851	218,045	139,086	357,131
	PER STUDENT	158	154	157	230	179
TRANSPORTATION	TOTAL AMOUNT	46,047	23,609	69,656	37,075	106,731
	PER STUDENT	48	55	50	61	54
CAPITAL EXPENDITURES FROM REVENUE	TOTAL AMOUNT	37,627	17,805	55,432	28,888	84,320
	PER STUDENT	39	42	40	48	42
DEBT CHARGES	TOTAL AMOUNT	90,737	43,031	133,768	72,254	207,022
	PER STUDENT	94	101	96	121	104
OTHER	TOTAL AMOUNT	31,389	17,811	49,200	66,442	115,642
	PER STUDENT	33	42	35	110	58
GRAND TOTAL	TOTAL AMOUNT	1,139,289	501,713	1,641,002	1,123,853	2,764,855
	PER STUDENT	1,185	1,173	1,181	1,857	1,386

Source: For Enrolment, See Minister's Report (1975), p. 41.
For Revenue & Expenditure, the same as table 10.2.

elementary students demonstrates the effectiveness of the equalization objectives (more correctly one aspect thereof) of the grant structure referred to in connection with Table 10.1. Table 10.3 also demonstrates the large differences between elementary (\$1,181) and secondary (\$1,857) per pupil expenditures. This difference is persistent across all the expenditure categories.

Tables 10.4, 10.5 and 10.6 give still another picture of school board expenditures. The enrolment changes, total expenditures and costs per student for the years 1970 through 1976 are presented, for public schools, separate schools and secondary schools, respectively. The row titled Index shows the relative changes in per pupil costs, using 1970 as the base year. The steady decreases in enrolments in public schools since 1970 is apparent. That decrease appears for the first time in 1976 for separate schools. Secondary schools through these years were experiencing steady increases. There is no obvious enrolment-unit-costs relationship. In the years 1970 to 1975, when separate schools had only increases in enrolments, and public schools only decreases, the index of per pupil expenditures for separate schools moved from 1,000 to 1,827, and for public schools from 1,000 to 1,724. However, secondary schools, which also had only increases in enrolments, had per pupil increases that moved the index from 1,000 to only 1,457. The behaviour of these indexes indicates that we are persistently reducing the gaps between separate and public school expenditures, and between elementary and secondary school expenditures. It tells us nothing about declining enrolments and unit costs.

Tables 10.4, 10.5 and 10.6 show also what the costs of public, separate and secondary schools would have been if these three categories of schools had had the same number of students in 1976 that they had in 1970. Under the column entitled Estimated Expenditures at 1970 Enrolments, we see that public schools would have been spending \$153,484,000 more in 1976 than they were and separate schools would have been spending \$5,949,000 less. The implication is that the enrolment related savings were about \$147,500,000 for elementary schools. The secondary schools would have been spending \$121,007,000 less had they stayed at their 1970 enrolment levels.

TABLE 10.4

ONTARIO SCHOOL BOARD REVENUES & EXPENDITURES, 1970-1976,
ANALYSIS OF COSTS AND LOSSES OR INCREASES PLUS LOCAL TAXATION AND PROVINCIAL GRANTS,
PUBLIC SCHOOLS

YEAR	AMOUNT	SEPT. 30	GAINS OR	ACTUAL	COST	ESTIMATED	INCREASES	LOCAL	PERCENT	AMOUNT	PROVINCIAL	PERCENT	AMOUNT
	%	ENROLMENT	LOSSES IN	EXPENDITURE	PER	EXPENDITURE	IN ESTIMATED	TAXATION	OF ACTUAL	PER	GRANTS	OF ACTUAL	PER
			ENROLMENT	\$ 000's	STUDENT	\$ 000's	EXPENDITURES	\$ 000's	EXPENDITURES	STUDENT	\$ 000's	EXPENDITURES	STUDENT
					\$		\$ 000's			\$			\$
1970	AMOUNT	1,047,055	+ 4,494	723,818	691.29	723,818	0	404,249	55.85%	386.08	303,930	41.99%	290.27
	INDEX				1,000								
1971	AMOUNT	1,034,703	-12,352	778,676	752.56	787,972	9,296	397,412	51.04	384.08	366,052	47.01	353.77
	INDEX				1,089								
1972	AMOUNT	1,022,935	-11,768	839,904	821.07	859,705	19,801	395,658	47.11	386.79	424,615	50.56	415.09
	INDEX				1,188								
1973	AMOUNT	998,668	-24,267	866,518	867.67	908,498	41,980	403,151	46.52	403.69	438,584	50.61	439.17
	INDEX				1,255								
1974	AMOUNT	977,545	-21,123	953,875	975.79	1,021,706	67,831	449,297	47.10	459.62	475,101	49.81	486.01
	INDEX				1,412								
1975	AMOUNT	961,625	-15,920	1,139,289	1,184.75	1,240,498	101,209	513,661	45.09	534.16	592,514	52.01	616.16
	INDEX				1,714								
1976	AMOUNT	937,292	-24,333	1,310,665	1,398.35	1,464,149	153,484	654,700	49.95	698.50	617,873	47.14	659.21
	INDEX				2,023								

Source: See Minister's Report (1969-77).

TABLE 10.5

ONTARIO SCHOOL BOARD REVENUES & EXPENDITURES, 1970-1976,
ANALYSIS OF COSTS AND LOSSES OR INCREASES PLUS LOCAL TAXATION AND PROVINCIAL GRANTS,
ROMAN CATHOLIC SEPARATE SCHOOLS

YEAR	AMOUNT %	SEPT. 30 ENROLMENT	GAINS OR LOSSES IN ENROLMENT	ACTUAL EXPENDITURE \$ 000's	COST PER STUDENT \$	ESTIMATED EXPENDITURE AT 1970 ENROLMENT \$ 000's	INCREASES IN ESTIMATED EXPENDITURES \$ 000's	LOCAL TAXATION \$ 000's	PERCENT OF ACTUAL EXPENDITURES	AMOUNT PER STUDENT \$	PROVINCIAL GRANTS \$ 000's	PERCENT OF ACTUAL EXPENDITURES	AMOUNT PER STUDENT \$
1970	AMOUNT	418,433	+4,877	268,577	641.86	268,577	0	53,893	20.07%	128.80	207,510	77.26%	495.92
	INDEX				1,000								
1971	AMOUNT	422,137	+3,704	300,035	710.75	297,401	- 2,634	54,080	18.02	128.11	235,362	78.44	557.55
	INDEX				1,107								
1972	AMOUNT	422,166	+ 29	325,818	771.78	322,938	- 2,880	53,190	16.33	125.99	262,743	80.64	622.37
	INDEX				1,202								
1973	AMOUNT	424,217	+2,051	360,206	849.11	355,296	- 4,910	56,164	15.59	132.39	278,650	77.36	656.86
	INDEX				1,323								
1974	AMOUNT	427,294	+3,077	397,637	930.59	389,390	- 8,247	60,310	15.17	141.14	320,983	80.72	751.20
	INDEX				1,450								
1975	AMOUNT	427,853	+ 559	501,713	1,172.63	490,667	-11,046	72,046	14.36	168.39	407,851	81.29	953.25
	INDEX				1,827								
1976	AMOUNT	422,793	-5,060	577,081	1,364.93	571,132	- 5,949	96,539	16.73	228.34	464,507	80.49	1,098.66
	INDEX				2,127								

Source: Ibid.

TABLE 10.6

ONTARIO SCHOOL BOARD REVENUES & EXPENDITURES, 1970-1976,
ANALYSIS OF COSTS AND LOSSES OR INCREASES PLUS LOCAL TAXATION AND PROVINCIAL GRANTS,
SECONDARY SCHOOLS

YEAR	AMOUNT	SEPT. 30 ENROLMENT	GAINS OR LOSSES IN ENROLMENT	ACTUAL EXPENDITURE \$ 000's	COST PER STUDENT \$	ESTIMATED EXPENDITURE AT 1970 ENROLMENT \$ 000's	INCREASES IN ESTIMATED EXPENDITURES \$ 000's	LOCAL TAXATION \$ 000's	PERCENT OF ACTUAL EXPENDITURES	AMOUNT PER STUDENT \$	PROVINCIAL GRANTS \$ 000's	PERCENT OF ACTUAL EXPENDITURES	AMOUNT PER STUDENT \$
1970	AMOUNT	556,913	+26,234	710,025	1,274.93	710,025	0	341,061	48.04%	612.41	333,139	46.92%	598.19
	INDEX				1,000								
1971	AMOUNT	574,520	+17,607	782,025	1,361.18	758,059	- 23,966	333,929	42.70	581.23	411,090	52.57	715.54
	INDEX				1,068								
1972	AMOUNT	583,013	+ 8,493	846,486	1,451.92	808,593	- 37,893	339,106	40.06	581.64	467,833	55.27	802.44
	INDEX				1,139								
1973	AMOUNT	585,725	+ 2,712	882,236	1,506.23	838,839	- 43,397	345,190	39.13	589.34	492,654	55.84	841.10
	INDEX				1,181								
1974	AMOUNT	589,650	+ 3,925	972,812	1,649.81	918,801	- 54,011	393,988	40.50	668.17	521,880	53.65	885.07
	INDEX				1,294								
1975	AMOUNT	605,160	+15,510	1,123,853	1,857.12	1,034,254	- 89,599	437,299	38.91	722.62	628,345	55.91	1,038.31
	INDEX				1,457								
1976	AMOUNT	613,055	+ 7,895	1,321,366	2,155.38	1,200,359	-121,007	620,323	46.95	1,011.86	637,805	48.28	1,040.37
	INDEX				1,691								

Source: Ibid.

Tables 10.4, 10.5 and 10.6 provide still another form of information of importance. They show the total revenue from local taxes and grants, and the percentages these sources were of school board expenditures for the years 1970 to 1976. For public schools, local taxes declined from 55.85% of expenditures in 1970 to 45.09% in 1975, then climbed to 49.95% in 1976, or to about one percentage point of where they were in 1971 (51.04%). For separate schools local taxes declined from 20.07% in 1970 to 14.36% in 1975, then climbed to 16.73% in 1976, or to about 1.29 percentage points of where they were in 1971. For secondary schools local taxes declined from 48.04% of expenditures in 1970 to 38.91% in 1975, then climbed to 46.95% in 1976, or to about one percentage point of where they were in 1970.

Table 10.7 presents another set of statistical series. In a less detailed and more summary way than the information on the growth of current dollar and real dollar incomes presented in the first chapter of this report, it gives us some indication of Ontario taxpayers' ability-to-pay. The real (constant) dollar incomes of families and of persons not-in-families was growing throughout the decade ending in 1976. However, while median family incomes increased in real dollars by 46.6% (\$7,689 to \$11,270), the median incomes in real dollars of persons not in families increased by only 35.4% (\$2,484 to \$3,363). I am aware that a significant part of the increase in family incomes over incomes of persons not-in-families may reflect at least in part increased labour force participation on the part of married women. Nevertheless, the differences in these rates of increases has influenced my views somewhat on which tax fields should be exploited for financing education. Even if these differences did not influence me, they would determine to some degree the political feasibility of alternative tax policies.

Table 10.7 indicates that the ability-to-pay for a high quality public education system has certainly not been diminishing in recent years (the somewhat disappointing performance of our economy in 1977 and 1978 notwithstanding). As was emphasized in Part I of this report, we are able financially to maintain or increase our contributions to public services, education included, through local taxes (taxes on real property).

TABLE 10.7

MEASURES OF ABILITY TO PAY TAXES, ONTARIO, 1967 TO 1976,
TRENDS IN FAMILY AND NON-FAMILY INCOMES

YEAR	FAMILY INCOME			PERSONS NOT IN FAMILIES			
	CURRENT DOLLARS		CONSTANT DOLLARS (1971)	CURRENT DOLLARS		CONSTANT DOLLARS (1971)	
	AVERAGE	MEDIAN		AVERAGE	MEDIAN	AVERAGE	MEDIAN
	\$	\$	\$	\$	\$	\$	\$
1967	7,366	6,644	8,515	2,959	2,149	3,420	2,484
1969	8,733	7,852	9,282	3,583	2,488	3,808	2,672
1971	10,113	9,121	10,113	3,877	2,608	3,877	2,608
1972	11,036	10,185	10,528	4,405	3,279	4,202	3,063
1973	12,454	11,328	11,047	4,768	3,416	4,230	3,007
1974	14,603	13,284	11,682	5,584	4,037	4,467	3,247
1975	16,368	14,874	11,818	6,187	4,544	4,467	3,256
1976	18,714	16,773	12,576	7,029	5,068	4,723	3,363

Source: Statistics Canada Report on Family Income

I do not intend, therefore, to make any recommendations for a massive shift from local support to provincial support. For one thing, doing so might reduce the motivation for reform of real-property taxation. We have not moved very effectively in the direction of property-tax reform but it remains a worthy goal and we ought not to do anything to reduce the motivation for it.

As mentioned above, I have decided in favour of conservation of the grants structure we have and in favour of maintaining the provincial-local partnership in education finance. In addition to not wanting to reduce the motivations for real-property taxation reform, I am persuaded in this direction because the best arguments for a straight provincial-finance system have nothing to do with declining enrolments. Indeed, declining enrolments make them less compelling. Other things being the same (in particular the rate of inflation), the problems of maintaining the local share in education finance would be more difficult than we know them to be if enrolments were not declining and costs continued to rise.

I do, however, have this major recommendation to make concerning the restructuring of education finance. I recommend:

All industrial and commercial properties* be assessed and taxed for school purposes directly by the province, and be exempted from school-related municipal taxation; there be one school-related industrial-commercial rate for the province; the proceeds of this tax be applied solely to the support of elementary (separate and public) and secondary education in the province as part of the equalization formula applicable to general legislative grants.

There are many variations on this theme of provincial taxation of industrial-commercial property for school purposes. I do not intend to deal with all of them. I will point out that I am not recommending any reform of municipal taxation of industrial-commercial property for general local government. If the present procedure of a single tax bill

* If an industrial or commercial property is owned by an individual and the share of an individual can be determined, then that person should have the right to direct the tax to the appropriate school system, public or Roman Catholic.

from the municipality is maintained, the part collected for school purposes can be turned over to the boards and be treated by them as part of their general grant revenues from the province. If that part exceeds 100% of the grant revenues due them, they would, of course, forward the excess to the province.

Those persons most opposed to real-property taxes, in particular on residential properties, may well see in this recommendation the opportunity to reduce or even eliminate the taxes for schools on residential properties. This is not the intention of the recommendation and should be avoided. It is not intended that a rate of taxation of industrial-commercial properties be applied that will alter very much the present ratios which exist between the rates on residential and on industrial-commercial properties in the support of education.

My second major recommendation concerning finance is concerned with what part of the burden of education costs will be borne by taxable real properties. I recommend:

The taxation of real estate for education purposes be the source of 40% of the total provincial costs of board operations within the ceiling of expenditures recognized for grant purposes. (If the first of these two major recommendations is accepted, there will be two components to the taxation of real estate: one will be the provincial tax on industrial-commercial properties for school purposes, the other will be the local taxes on residential and farm properties for school purposes. It is the sum of both of these that is to be 40% of the costs of board operations.)

I am aware of the complexities of the grant system for school purposes. I doubt that there are more than a handful of people in the province who understand it perfectly. It is probably not possible to determine exactly, beforehand, what the property tax and provincial grants share of the total approved costs of board operations will be. However, a close approximation can be achieved and that will be good enough. Also, the 40%-60% apportionment ought not to be fixed once and for all or reached immediately. We must move gradually to any new level. I do, however, believe that it is important that the target (for the property tax component) be significantly lower than the 50-50

partnership we are now approaching. I don't deny that the property tax contribution could be 50% or greater without imposing intolerable hardships on ratepayers or imperilling the quality of education, provided more protections of our lowest-income property-tax payers (and payers of rents) are built into our income tax system. But I don't believe the people of this province want a significant increase in our dependence upon property taxes. At any rate they are not ready for it, and if it is to come it can wait upon a significant degree of general reform in this means of taxation.

The greatest benefit from fixing a target of 40% (or some approximation thereof) for property-tax in the support of education will more likely be realized if it remains fixed for several years and if a revision of it is announced a year or two in advance and then fixed again for several years.

The main advantage to the removal of the industrial-commercial tax-base from local taxing authorities is that it will greatly reduce the variations in burdens associated with per-pupil expenditures above the "recognized ceiling". It is my belief that it is now the consensus of most politicians and education administrators, and indeed of most taxpayers, that expenditures above the grant-ceiling should be determined at the discretion of the individual boards. But there is also a consensus that the inter-board differences in the local tax burdens associated with the costs of these discretionary expenditures is too great. Provincialization of the industrial-commercial tax base will allow the boards to make discretionary adjustments in education expenditures and reduce the inter-board differences in the burdens associated with those expenditure adjustments.

Some boards will still have more equalized assessment per student to tax than others. They will still be able to assume above-ceiling expenditures with less burden on their ratepayers than less well-endowed boards. So be it. If we decide that this inequity is intolerable, we can deal with it a few years from now. Moreover, as Rideout points out in his study of alternatives for education finance, that final step in

equalizing the burdens of education finance can very likely be accommodated through further adjustments in the grants plan we have. In any case, there are no problems of declining enrolment that necessitate that adjustment.

I am very well aware that the two major recommendations I have made pertaining to education finance are not responses to problems emanating directly from declining enrolments. However, they are responses to some very important indirect consequences, which may perhaps better be described as direct consequences of our political behaviour in dealing with declining enrolments. It was probably prudent public finance, but a political error, to appropriate so much of the savings from declining enrolments to the provincial treasury so quickly.¹ The financial recommendations I have offered are directed at nurturing the political foundations of the provincial-local education-finance partnership, and at improving the morale of trustees, administrators, ratepayers and teachers.

I have one more recommendation that some people may choose not to recognize as being directly related to issues emanating from declining enrolments. However, since it relates to teachers' pensions and these become ever more significant under existing and continuing conditions of redundancy in the teacher force, I claim that it is directly related to declining enrolments. I recommend:

The employer's contributions to the Teachers' Superannuation Fund be made by the boards and those contributions be included among recognized operating expenditures for grant purposes.

This is intended to locate the payment of these contributions with the employers of teachers, who determine indirectly what the contributions will be. Salaries are negotiated locally, and teachers are appointed and promoted locally. Those salaries determine the Superannuation Fund contributions. At a time when adjustments in retirement eligibilities and inducements may be an important part of personnel planning, we

¹Under the present grant plan the province realizes its full share of the savings for every pupil of the declining enrolment. Boards do not have this immediate savings, and indeed the cards seem stacked in favour of the province vis-a-vis the school boards. A more equitable sharing of the savings is obviously indicated.

cannot afford the anomaly of having the costs of pensions determined by one authority (the school boards) and paid by another (the province)¹ which guarantees the actuarial soundness of the fund.

The next recommendation will, I am sure, be conceded by all to be dealing with problems of declining enrolments. I recommend:

Boards with declining enrolments be granted special assistance through the introduction of some form of "slip-year financing" (averaging of enrolments) that spreads the loss in grant revenues from declining enrolments over several years throughout the whole period of decline.

I could have made this recommendation much more specific, but have decided against it. Any of a number of variations on the basic notion will give satisfactory results. The rationale for this recommendation can be expressed this way. Even the best local administration cannot in all cases make a quick, non-disruptive adjustment to new enrolment levels, especially where the declines are scattered widely throughout the schools of the system. In some cases the problems will be severe enough to warrant compensatory intervention by the province. I have made it clear earlier that the savings from declining enrolments are significant and much to be desired. It is the responsibility of trustees and local administrators to see that savings do in fact accrue to local and provincial taxpayers. But prudence will dictate that we not always opt for the fastest possible realization of those savings. In some cases we can wait -- a year, or two, or three, or perhaps even longer.

In the Second Interim Report I recommended that protection from the sudden loss of revenues be limited to those boards experiencing declines greater than the projected average decline. We might assume it to be within the administrative and planning capacities of boards to prepare for, and cope with, the average or "expected" rate of decline. However, I am not now committed to this recommendation. I do not see that it will do violence to our standards of efficiency -- it may in fact promote them -- to allow even the problems of accommodating low rates of

¹In the unlikely event that salary levels were negotiated directly with the Minister for the province as a whole, i.e., a single salary scale set for the province, which is the case in some provinces, the argument would still hold unless the actual selection and appointment of teachers was also removed from the boards.

decrease to be assuaged by a degree of financial compensation. The important point is that the compensation be temporary and its duration specified.

My further recommendations are addressed to conditions that do not necessarily result from declining enrolments, but are unquestionably exacerbated by those declines. I recommend:

The continuation of the Special grants for isolate boards. In addition, some schools in other than isolate boards be recognized by the Minister as operating under unusual geographical conditions, or under other unusually challenging conditions, and be designated by the Minister as entitled to receive special funds. The purpose of these funds will be to allow them to operate at significantly higher than usual unit costs in order to provide a minimally acceptable school program (as defined by the Minister). It is further recommended that the associated regulations ensure that the additional funds are in fact spent on the designated schools.

"Special" or "stimulation" grants as now designated by the Minister of Education be incorporated into the legislative grant formula, possibly through "weighting factors" (note the exceptions referred to below). If, however, these grants are to be retained as a separate part of the school grants system, I recommend that the province pay the full costs of the services they are intended to promote.

Grants for Special Education, Franco-phone Education and the Heritage Language Program be provided for in a special section of the regulations and the related grants be monitored to ensure that they are, in fact, spent only for the intended purposes.

We should go about the business of improving our education finance structure under the assumption that significant savings from declining enrolments may be realized by Ontarians in their capacities as local and provincial taxpayers. Those savings should be maximized and should be had as soon as feasible, but this objective should be secondary to a smooth transition to the new scales of operation. There is no justification for any action that will result in deteriorating education services accompanying declining enrolments. Indeed, one legitimate use of the savings associated with declining enrolment is to provide higher

quality education and extended school services. We can finance our public school system with an approximation of the present provincial-local partnership, or we can revise it to increase the role of either partner. Most of the currently emerging problems regarding the local contribution to this partnership originate with inflation and certainly not with declining enrolment. Assuming we cannot stop inflation, we will find it very difficult to maintain the local contribution to the school finance partnership without significant reform in real-property taxation.

Section III

Summary

Appendix 1

1. School boards increase their cooperation with each other in the design of programs and development of curriculum materials. Regional officials of the Ministry of Education be instructed to provide their services in promoting and coordinating this co-operation on a regional basis, and in some cases on an inter-regional basis.
2. The Ministry of Education establish a team of Ministry and seconded external specialists to advise and assist boards and groups of boards in program planning and development work. Establish that access to the advisory team be through regional officials of the Ministry; the advisory team become operational only after a training program of three months; and the training program be a cooperative effort of the Ministry of Education, the Ontario Teachers' Federation, the Ontario Association of Educational Administrative Officials, university faculties of education and the boards.
3. The Ministry of Education take steps immediately to determine whether all schools throughout the province have the required program, i.e., the minimum set of educational offerings specified by provincial policy. If necessary, redirect the Ministry's monitoring process to this activity.
4. A kindergarten to grade 13 foundation program for the Ontario schools be developed and publicly tested by the Ministry of Education.
5. The Ministry of Education and the Ministry of Colleges and Universities make coordinated statements of their policies on the training of increasing numbers of adults with incomplete secondary school educations. These statements should clarify for the secondary schools the amount of initiative they should take in "recruiting" adult students and recent school leavers, both for full-time and part-time study, in academic and vocational areas, and the legislative grant consequences of their behaviour.
6. The Minister of Education, in consultation with interested parties, should plan for the establishment, on an experimental basis, of one or more curriculum materials development centres, or for the subsidization of, and participation in, an existing centre.
7. The community liaison encouraged by Ministry guidelines PONA (People of Native Ancestry) I, II and III (in preparation) be continued and expanded. The intent of the liaison should be to make the curriculum offered the students as relevant to their culture as possible without the curriculum becoming a discriminatory confinement of opportunity. One way might be to increase the use of native teachers.
8. The Ministry of Education play an active role in cooperation with the boards in providing empathetic guidance personnel able to increase the awareness of students of the range of options open to them.

9. The Ministry of Education and the boards encourage the Native Peoples to exercise their rights of involvement in board and school affairs, including by seeking board membership.
10. In the case of split or combined-grade classes, a special effort be made to schedule separate FSL classes for each grade.
11. Schools attempt to reduce the movement of itinerant teachers from school to school by changing FSL sessions from 20 to 40 minutes (this is a stated aim of the Ministry's new FSL program).
12. Boards pay special attention to the integration of secondary and elementary FSL programs.
13. Where small numbers of students for senior classes (e.g., grades 11-13) jeopardize the maintenance of language programs, boards designate at least one high school as an FSL centre and consolidate senior classes to assure a complete program (grades 9-13).
14. Boards consider the cooperative services model initiated by the Midnorthern Region, and other cooperative models, to ensure that some consultant services remain available to teachers.
15. The focus of ESL teacher training courses shift from that of preparing only specialist teachers to that of giving all interested teachers some ESL skills (while continuing to prepare some ESL specialists).
16. The Ministry weighting factor continue to be tied to the number of ESL teachers employed, and ESL become a mandatory service, i.e., the Ministry of Education clearly establish the right of all children needing ESL or ESL/D to that instruction.
17. Some Experience '79¹ students, together with an experienced TESL member, be utilized next summer to prepare annotated ESL resource lists.
18. Cost-effectiveness of ESL programs and identification of systematic assessment and monitoring processes be incorporated in any list of projects being considered for funding under the contractual research program of the Ministry of Education.
19. The present initiatives on the incorporation of the ethic of multiculturalism into the curriculum be encouraged and continued.
20. All teachers be prepared for teaching in a multicultural society. Multiculturalism, as a part of teacher training, should be an ethic that permeates the syllabus.
21. There be close liaison among publishers, the Ministry and representatives for the various majority and minority groups to ensure quality multicultural materials.

¹ A provincially-funded summer program to supply employment for senior secondary and university students.

22. The initiatives begun under the Learning Materials Development Plan be continued and be expanded when feasible to include specific support materials prepared "under contract" to the Ministry.
23. Where numbers for senior classes decline drastically, boards consider creating a language centre at one high school to ensure that a full sequential language program be offered to students who have commenced study of a language.
24. The choice of languages to be offered be more influenced by community needs than by school traditions.
25. When the Heritage Language program appears to be fully operational, attempts be made to measure its effects on secondary school programming.
26. Neighbouring boards cooperate to avoid duplication of services, in particular languages, and to ensure that consultant services are available to teachers.
27. The Heritage Language program be continued in its present form for a minimum of four or five years. When the program appears to be fully operational and stabilizing, some attempts be made to predict the implications for secondary school programming and to develop plans for the long-term development of the program in schools at all levels.
28. The Minister of Education and the Minister of Community Services confer to determine the extent of services to be provided to "normal" and to "underprivileged" or "high risk" pre-school children, and to very young school children during their out-of-school hours.
29. The Ministry of Education ensure, through monitoring processes and the provision of sufficient financial and other resources, that all children who now, by accepted government policy, have the right to special education services, receive the required treatment.
30. The necessary professional training in special education be provided in the teacher training institutions, supplemented where necessary at the school systems level through various forms of in-service programs for retraining and upgrading experienced teachers; and particular attention be paid to the results of the survey of the adequacy of current programs reported by Kobrick and Reich (see Table 8, p. 33, Working Paper #36, Commission on Declining School Enrolments in Ontario, 1978).
31. The Minister of Education amend the Acts and Regulations to include in clear and unmistakable terms the unalienable right of every child to receive the education he or she needs, as determined by the Minister of Education.
32. The Minister of Education encourage the development of community schools and to this end open negotiations with the Minister of Community and Social Services to ensure cooperation and coordination of efforts and services, including funding and administration.

33. The Minister of Education contract with the OISE Department of Educational Planning (which has developed the computer model needed and has access to all the data required) to prepare the calculations mentioned (in the above paragraph) for the school boards each year, as a service to local planning.
34. The Minister of Education close both the Toronto and Hamilton campuses of the Ontario Teacher Education College at the end of June, 1979, and transfer their pre-service responsibilities to the faculties of education.
35. The Ministry of Education seriously consider ceasing to offer or contract professional development courses for teachers, but retain an involvement by providing leadership in a coordinating capacity for such programs offered in or by faculties of education and OISE.
36. The Ministry of Education and Ministry of Universities and Colleges establish, and announce immediately, a pre-service quota for funding for September, 1979, and for September, 1980, which would be 50% less than the 1977-78 actual admissions.
37. The Ministry of Education and the Ministry of Universities and Colleges, in consultation with the Council of Ontario Universities and the specific universities which have faculties of education, determine the minimum size of the pre-service capacity for teacher education which should be maintained over the next 10 years, including specification of which faculties shall be closed, if any, and the quotas for each of the remaining faculties, which, subject to periodic review, they will guarantee to fund.
38. The plan in the preceding recommendation be revised in 1988 in accordance with the needs for pre-service education which seem likely for the 1990's and beyond.
39. The Ministry of Education and the Ministry of Universities and Colleges, in consultation with the Ontario Teachers' Federation and the teacher training institutions, prepare an official statement of the likely requirements of teachers for the next decade, including the probable number of newly qualified graduates from the teacher training institutions who are likely to be appointed as teachers in our publicly-supported school system.
40. The statement called for in the preceding recommendation be distributed to all grade 13 classes, to all universities through their presidents and the deans of arts and science and education and be published in full in the Ministry of Education publication Dimensions and through press releases and other media channels.
41. The Minister of Education and of Universities and Colleges request the school boards to review and revise the projection of teacher demand, by subject areas, and this projection be up-dated and reported annually to the Ministry through a continuing contract with the OISE Department of Educational Planning.

42. Based on the information obtained from the report requested in the preceding recommendation, the Ministry, in liaison with the training institutions, arrange coordination of the numbers being trained in various subject areas and levels, but without applying rigid manpower quotas.
43. Faculties of education revise their programs to make it possible for candidates to gain maximum flexibility in subject areas and school levels.
44. Faculties of education be encouraged to diversify their programs to graduate persons who are qualified for education-related roles other than classroom teachers. Such areas might include day-care workers, welfare and social workers, nursery school teachers, education in third world countries, e.g., CUSO workers, education officers for industrial and commercial firms, for penal systems and for community literacy and adult education programs.
45. Faculties be permitted greater freedom and flexibility in placing their students for the practicums associated with their programs and be encouraged to diversify this aspect of the training program.
46. When a faculty develops a diversified program of the kind mentioned above and when it meets with the approval of the Ministry of Education and the Ministry of Universities and Colleges, it be granted an additional admission quota above the basic pre-service quota referred to in earlier recommendations.
47. One of the faculties of education be turned into a centre for the training of bilingual teachers for all the schools of Ontario. Such a school could become a microcosm in which candidates from both language backgrounds could live and work in a truly bilingual community. Such a faculty would need to be located in a community which provides easy access to both languages and cultures.
48. Faculties develop special programs so that redundant teachers can return to the faculties for retraining there or in another faculty of the university to gain qualifications in other fields where they may be required.
49. The Ministry of Education accept the principle of an induction program for newly qualified teachers and request faculties of education to plan and offer these programs as a continuation of the practice teaching process.
50. The Ministry of Education abandon its long-standing policy of permanent certification of teachers in favour of a system of term certification which would be valid for five years and which would be renewable only upon satisfactory evidence of serious professional development activity (at least the equivalent of a six-week course) during the preceding period. The primary criteria for renewal would be evidence of continuing professional development and growth, not only through the attainment of further academic

and professional qualifications, but through evidence of satisfactory and improving performance on the job (whether or not it be classroom teaching).

51. Each faculty of education and OISE be encouraged to develop a substantial program of in-service and professional development offerings for practising teachers, including the induction program specified in a previous recommendation. This could be accomplished by the ministries agreeing to fund a certain percentage (e.g., 20%) of current faculty complement for a specific and approved in-service education function, as is done in Scotland. Alternately, but more indirectly, this could be accomplished by the development of a suitable formula for funding in-service activities on a full-time equivalent basis on the same scale as pre-service activities. Of the two funding methods, I prefer the latter and recommend its adoption.
52. Each of the universities with a faculty of education and OISE be encouraged, perhaps through funding incentives, to establish a diploma or degree program in continuing education, toward which various units of in-service offerings could be presented for credit. Enrolments in such diploma or degree courses be funded on the formula referred to in the immediately preceding recommendation.
53. All units creditable towards a diploma or degree in continuing education be approved by the appropriate university senate, it being understood that such units for credit towards the diploma only do not need to follow the usual full course or half course patterns common in most other faculties. To make in-service training accessible to as many teachers as possible, units which might be equivalent to fifth courses or quarter courses be permissible towards obtaining the diploma.
54. In planning programs of continuing education, faculties of education and OISE seek the advice and participation of competent experienced teachers and administrators along with input from their own faculty members.
55. The Ministry agree to fund a certain percentage (say 10%) of current faculty complement at a faculty of education or at OISE for a specific and approved development consultative service to the school system.
56. The incidental expenses involved in the presentation of the short professional development activities mentioned in the preceding recommendation (excluding, of course, stipends for faculty members, which should not be necessary) should be covered by fees paid by the participating teachers.
57. Boards of Education be encouraged, where necessary, to maintain pools of relief teachers to release teachers for required in-service activities.

58. First year contracts for the hiring of inexperienced teachers be for less than full-time teaching duties (perhaps 1/2 or 2/3 contracts with appropriate fractional salaries) and that first year teachers be required to participate in induction programs and seminars organized (in cooperation with the Ministry of Education and teachers' federations) by faculties of education and OISE.
59. Whenever possible and keeping in mind the need of access to special resources, faculties of education and OISE be encouraged to take their in-service offerings off campus to centres more accessible to many of their teacher clients. This applies particularly to the needs of teachers in Northern Ontario.
60. The Ministries of Education and Universities and Colleges take steps to set up an Advisory Committee on the Supply and Training of Teachers, on which all appropriate interested parties be represented.¹
61. Faculties of education and OISE be encouraged to maintain their programs in graduate studies in education at least at the current levels of admissions.
62. Faculties of education and OISE be encouraged to expand their activities in education research, and all staff members have equal access to contract research funds and general research funds provided by ministries and other granting bodies.
63. The Ministries consider the development of an appropriate policy of compensation for all those in teacher education who become redundant because of Ministry decision and who are unable, even with assistance, to find reasonably equivalent alternative employment.
64. Unless automatic vertical mobility is introduced into the system and enforced, all programs aimed at producing more trained supervisory officers be severely curtailed for the next five years.
65. Programs of in-service training for the incumbents be continued and their continuing professional education be encouraged through study leaves and the raising of expected levels of qualifications to include graduate courses at the master's and doctorate levels, as well as through workshops, conferences, other short courses and exchange arrangements. This would not mean any marked departure from existing practices, except possibly for a greater emphasis on graduate studies in education.
66. In all programs of in-service education particular attention be paid to the new problems of management in a steady-state or shrinking school system. Under these conditions new situations arise for which the traditional solutions may not be appropriate. Included in these programs should be a focus on the new form of management, through consultation and consensus, which must follow as we move from the bureaucratic to the political model of school administration.

¹The recently approved Ontario Teacher Education Forum is a move in the right direction and with some modifications it might become the nucleus of such an advisory committee.

67. The regional offices be strengthened to the fullest extent possible within the existing financial guidelines to help school boards develop demographic, building and finance plans, implement curriculum guidelines and prepare curriculum materials.
68. Initiate immediately a sustained effort to promote decentralized political solutions to emerging local and provincial problems associated with declining enrolments, in particular, problems of coordination and cooperation. Begin the organization of many sessions for discussion, negotiation and trade-offs to deal with specific inter-board and inter-interest group issues. Encourage board level administrators and Ministry of Education officials to take the initiative in promoting these activities.
69. Take steps to increase the Ministry's control over certain finance-related decisions, including the use and sale of school buildings and sites and the working conditions and benefits of school staff members, such as pensions, termination gratuities and like arrangements.
70. Do what is in the Ministry's power to facilitate the emergence of a strong province-wide trustees organization that can speak with one voice and play an important political role.
71. The operations of the regional offices be extended to provide greater assistance to the local school boards, if necessary through staff transfers from the central Toronto office.
72. The Minister review the objectives and operations, including in particular the staffing complement, of the central office and of the regional offices to determine the extent to which decentralization in appropriate areas is functional.
73. Each school board in the province be required by the Minister of Education to conduct a thorough "needs assessment" of the positions and functions of its administrative staff, from the position of vice-principal to that of director, and prepare a plan for the short-term and long-term future of the staffing of its schools and central office(s). The needs assessment and plan be reviewed and revised, as necessary, every three years and in each case a copy of the assessment and of the staffing plan be filed, for evaluation and approval, with the Ministry of Education through its regional office.
74. In conducting its needs assessment and in preparing its staffing plan, the school board operate on the assumption that more of the responsibilities be delegated to staff at the school level and that the Ministry of Education in its evaluation and approval of each plan bear this in mind.
75. The Minister ensure that where emergency or crisis conditions of short duration arise, appointments of staff by boards to deal with them be on a short-term task-determined basis only.

76. The Minister of Education take steps at once to ensure that proper records of job classifications are made in the Ministry and maintained, and the result published annually.
77. Pupil ratios be calculated and reported for each type of position, based on September 30 enrolment figures.
78. In negotiations with school boards the teacher associations make elimination of large classes as a first priority, making class size studies each year for elementary and secondary schools and working directly for a maximum size to be set, instead of dealing with rather meaningless reductions, of the average pupil-teacher ratio.
79. No further negotiations on the basis of the PTR alone be conducted by teachers or by boards.
80. The concept of continuing employment be instituted for full-time and part-time appointments.
81. After early retirement up to 100 days teaching employment per year, instead of the present 20, be permitted without penalty to age 65.
82. The superannuation regulations be amended to permit, during the period between now and 1986, early retirement on the basis of an 85 factor.
83. The fund be monitored on an annual basis with a thorough evaluation in 1986, and if necessary, contributions of employers and employees be increased from time to time to keep the fund sound.
84. In light of the 1986 evaluation and the conditions of the economy at that time, and of its future prospects, a decision be made in 1986 whether to continue on the basis of the 85 factor or to revert to the 90 factor or to age 65, or to change to age 70.
85. The teaching profession begin work together on the following:
 - (a) early retirement plans;
 - (b) job sharing plans, including night school and summer school jobs;
 - (c) elimination of large classes;
 - (d) encourage most kinds of part-time continuing employment;
 - (e) promotion or transfers, exchanges, and leaves of absence;¹
 - (f) encouragement of in-service training, including retraining for teaching, as well as for related or even unrelated jobs in business and industry.
86. Present time requirements regarding notice of resignation be withdrawn, and in lieu thereof there be incorporated in the collective

¹See Industrial Inquiry Commission on Educational Leave and Productivity appointed by the Federal Ministry of Labour, 150 Main Street West, Hamilton, L8T 1H8.

agreement between each board and its teaching staff a clause stipulating that notice of intent to resign be given as early as possible, preferably one year in advance of the date of severance of employment.

87. Each board be required to give at least one year's (twelve months) notice of dismissal on the basis of surplus/redundancy, and if the services of the employee are still required within 24 months of notice of such dismissal, he or she be reinstated with full rights, privileges and benefits previously enjoyed.
88. The Minister of Education collect and distribute annually complete information in regard to the number, qualifications, age and sex of all categories of school staff, including support staff, employed by school board.¹
89. The Minister of Education amend the Acts and Regulations to provide for term appointments for all supervisory and administrative positions for each Board in the province, and the Regulations specify the period and conditions of such term appointments, including the amount of stipend which may be paid and recognized for legislative grant purposes.²
90. Each school board prepare immediately, for submission to the Ministry of Education by June, 1979, short-term plans up to 1983 and long-term plans to 1988 covering the conditions of employment, supply and demand, remuneration and pensions of full-time and part-time non-certificated staff members, including plans, if any, for contracting out services at present or in the future.
91. The Ministry of Education conduct an investigation into the causes and effects of contracting out to determine the relative benefits to the education system and society as a whole, and that the Canadian Union of Public Employees and other interested labour and professional associations be directly involved in this investigation.
92. A detailed staffing and cost study be made for secondary schools, similar to that already completed by Rideout (1977) for elementary schools, to include a review of formulae for allocating staff and a series of case studies of the roles played in education by non-certificated staff and their contributions to our schools.
93. Where non-certificated staff, such as registered psychologists, are assigned to active work in special education programs, they be counted, in proportion to their involvement in the program, in the weighting factor for special education used in the calculation of legislative grants to school boards.

¹Complete data are not given in the 1977 Report of the Minister, although they were for 1975 and 1976.

²The same practice should apply, under the same conditions, to employees of the Ministry of Education, at the central offices and in the regional offices.

94. There be only two bargaining units involved with non-certified staff for each board, one for secretarial and clerical staff, lay assistants, attendance counsellors, audio-visual technicians, and psychologists, and the other for maintenance, operations, transportation, and cafeteria personnel.
95. Every staff member be included in one of the bargaining units mentioned immediately above, or at least that strong encouragement to this end be provided by each school board.
96. Part-time employees be included in the bargaining units and be granted the same fringe benefits, including pension opportunities, as full-time employees.
97. Every board be given the authority to dispose of surplus properties and to apply the proceeds immediately to the purchase of other real properties, or to put the proceeds in an escrow account for a period up to five years without the negative grant being imposed. At any time during the five years the board should be allowed to use those funds to purchase new properties, the acquisition of which has been approved by the Ministry. Income from the funds in escrow should be apportioned between the board and the Ministry in the same proportion as the proceeds from the disposal would have been apportioned.
98. The Ministry of Education pay in full, from current revenue, the costs of all new sites, buildings and additions, including replacements, approved by the Minister, and hence own them outright. This provision should be made effective as soon as possible and made retroactive to all real property-related expenditures approved after December 31, 1977.
99. (i) A two-year moratorium be placed on building new secondary school accommodations and excess demand for place be accommodated over the short-run by busing.

(ii) At least 50% of the capital budget be directed to renovation, and these capital funds be paid to the boards on the same basis (i.e., in the same ratio of provincial expenditures to local expenditures) as operating grants.

(iii) Capital expenditures continue to be monitored by the Ministry through regional offices.

(iv) Where surplus capacity of one board can meet the requirements of a neighbouring or overlapping board, the services of the Ministry be offered in negotiating the arrangements and terms, and where it is in the public interest, to mandate these arrangements and terms. The Minister should, if necessary, indicate that Ministerial approval of the intended property transactions of both boards is contingent upon such negotiations serving the interest of local and provincial taxpayers.

- (v) All boards be requested to prepare for public distribution a statement of their policies and procedures regarding transportation of pupils, possible or anticipated school and classroom closings and the use of space no longer needed for instructional purposes (as discussed in the Second Interim Report and in Information Bulletin #1).
100. All industrial and commercial properties^{*} be assessed and taxed for school purposes directly by the province, and be exempted from school-related municipal taxation; there be one school-related industrial-commercial rate for the province, the proceeds of this tax be applied solely to the support of elementary (separate and public) and secondary education in the province as part of the equalization formula applicable to general legislative grants.
101. The taxation of real estate for education purposes be the source of 40% of the total provincial costs of board operations within the ceiling of expenditures recognized for grant purposes. (If the first of these two major recommendations is accepted, there will be two components to the taxation of real estate: one will be the provincial tax on industrial-commercial properties for school purposes, the other will be the local taxes on residential and farm properties for school purposes. It is the sum of both of these that is to be 40% of the costs of board operations.)
102. The employer's contributions to the Teachers' Superannuation Fund be made by the boards and that those contributions be included among recognized operating expenditures for grant purposes.
103. Boards with declining enrolments be granted special assistance through the introduction of some form of "slip-year financing" (averaging of enrolments) that spreads the loss in grant revenues from declining enrolments over several years throughout the whole period of decline.
104. The continuation of the special grants for isolate boards. In addition, I recommend that some schools in other than isolate boards, be recognized by the Minister as operating under unusual geographical conditions, or under other unusually challenging conditions, and be designated by the Minister as entitled to receive special funds. The purpose of these funds will be to allow them to operate at significantly higher than usual unit costs in order to provide a minimally acceptable school program (as defined by the Minister). It is further recommended that the associated regulations ensure that the additional funds are in fact spent on the designated schools.
105. "Special" or "stimulation" grants as now designated by the Minister of Education be incorporated into the legislative grant formula, possibly through "weighting factors" (note the exceptions referred

^{*} If an industrial or commercial property is owned by an individual and the share of an individual can be determined, then that person should have the right to direct the tax to the appropriate school system, public or Roman Catholic.

to below). If, however, these grants are to be retained as a separate part of the school grants system, I recommend that the province pay the full costs of the services they are intended to promote.

106. Grants for Special Education, Franco-phone Education and the Heritage Language Program be provided for in a special section of the regulations and that the related grants be monitored to ensure that they are, in fact, spent only for the intended purposes.
107. Never lose sight of the fact that the child as the learner is not only the centre of the school system but the only reason for its existence.

Appendix 2

Estimates of Costs of Implementing Recommendations

The recommendations of this Commission are mainly directed to a graceful accommodation of the new demographic and economic aspects of our publicly-supported school system. Few of the recommendations are amenable to meaningful cost estimations. In most cases that are, the cost consequences are so obvious it is hardly necessary to point them out.

A recommendation with obvious cost implications is the one asking that the province be the major partner in a 60-40 relationship in the finance of board operating costs. The behaviour of the province in the years since 1975 suggests that we are now approaching a 50-50 partnership. The recommended shift in the burdens should have no effect on unit costs, but it may. Such a significant change in our financing of education could have some effect on our propensity to spend on education. Our education expenditures, both before and after a change in the apportionment of costs, will be the product of many political processes.

So far as school finance is concerned, the most fundamental recommendation offered in this report is that, for school purposes, the basis for industrial-commercial assessment be made equal across the province and taxed at the same rate everywhere. It is possible that such a restructuring of the system would have profound political consequences. Residential property owners, seeing an opportunity to lower their taxes, might organize to exert political pressure to increase the contribution of the industrial-commercial properties to school finance. My recommendation was that the industrial-commercial rate be fixed initially at the point that would have those properties paying the same portion of board expenditures that they now pay as a total for the province. It should be noted that those properties, when taxed by municipalities, are now paying some portion of above-ceiling expenditures. To tax them at the same rate across the province and to apportion the revenues evenly to the boards, would be, in effect, to raise the ceilings

somewhat for some boards. However, there is no reason to assume that would necessarily lead to significant increases in expenditures. Some boards now spending near or just above the ceiling would have some inducement to spend a bit more than they are. Some boards now spending above the ceiling (and getting relatively large portions of their tax revenue from industrial-commercial assessments) would have to increase taxes on residential properties to maintain their present expenditure levels. The result of these changed circumstances would probably be some modest increase in total board expenditures across the province. It would not be at the expense of the province. It would have to be at the expense of higher taxes on residential properties in boards that now have disproportionately high industrial-commercial assessments and are unwilling to accompany the erosion in their relative advantages with decreases in unit costs.

The provincialization of assessment and taxation rates of industrial-commercial properties is tantamount to making the above-ceiling expenditures of a board dependent upon the willingness of residential property owners in that board's jurisdiction to underwrite above-ceiling school expenditures. Householders would be paying more directly -- and paying in full -- for what they presume to be the benefits of units of public schooling beyond those purchased by within-ceiling expenditures. It is impossible to predict what the effects of this would be on our propensities to spend on education at the local level.

Because the weight of evidence is against significant and lasting diseconomies associated with declining enrolments, I have assumed that there will be savings associated with declining enrolments. These savings will be roughly in proportion to the decline in enrolments. Those declines have been about 2% a year in elementary schools for some time, and will be for a few more years. Starting next year or the year after, declines of 2% to 4% in secondary schools will be the rule for about five years. We can assume that our savings will be in proportion to the declines. I have recommended that the savings from these enrolment declines not be realized immediately. If it is decided that some variation of slip-year financing or a rolling average of some type

be employed to reduce the organizational-administrative problems of accommodating enrolment changes, a part of the savings that will accrue to the province from declining enrolments will be postponed for several years. A 3-year rolling average is often suggested. If it is elected, it will mean that a 2% decline in enrolments would result in only about .67% accruing the first year, 1.34% the second year and the full 2% the third and subsequent years.

People tend to spend more on education as their incomes increase. The poor performance of the economy in recent years and the anticipated very modest improvements in the foreseeable future notwithstanding, we will probably elect to spend a little bit more per student (in real terms) most years. This will make it virtually impossible to determine just what the savings from declining enrolments will have been. Those savings can be spent any way we choose. Higher quality education (i.e., higher per pupil expenditures) is one very appropriate way. Nevertheless, the savings from declining enrolments are one thing, increased expenditures per student are another. What has been recommended in this report will cost in a given year, Year Y, about 2/3 of the possible savings from declining enrolments from Year Y-1 to Year Y. In Year Y+1 it will cost about 1/3 of the possible savings from Year Y-1 to Year Y. In Year Y+2 it will have no costs.

The recommendations that the teacher training institutions cut enrolments by 50% from September, 1977, to September, 1979, will mean, ultimately, a 50% savings in grants to the training institutions from the province for pre-service training. However, since post-secondary institutions already use a rolling average in determining their enrolments for grant purposes, those savings will not be realized immediately. The recommendation is that the institutions receive a grant for research, field service and continuing professional education (including in-service training). This recommendation will have a cost. It is suggested that 40% of the savings to the province from declining pre-service enrolments in the training institutions be foregone (or more accurately, immediately reinvested) for this purpose.

In general, the recommendations in this report are for policies that ensure for taxpayers, locally and provincially, the potential savings from enrolment declines. The costs are those associated with foregoing a part of those savings in the short-run to facilitate a reorganization. The recommendation for a modest but significant transfer of the burden of education costs from local taxes to provincial taxes will be a cost to the provincial government, but not an added cost to the people of the province in their dual capacities as local and provincial taxpayers.

In these concluding remarks on costs I have spoken about costs and savings in real dollar terms and avoided the issue of inflation. Again, however, I will make the point that most of what at first appear to be the problems of accommodating to enrolment changes turn out, upon closer examination, to be the problems of managing and financing our school system under inflationary conditions.

I have made the point that it is unlikely that we will elect provincial or local expenditure policies to reduce the per-pupil expenditures in real terms. It is more likely that we will continue to spend more per pupil over time, even though the rate of that increase will probably be very modest in comparison to recent history. But I have also made the point that we may well choose to spend a smaller portion of gross provincial product or of government revenues (provincial and local) on our publicly-supported school system. My main concern at this point is that we not let inflation influence our decisions to spend more or less on education.

In my Second Interim Report I recommended that, for two years, the grant per-pupil on a provincial basis not fall below the 1978 grant plus an adjustment for inflation. I have made recommendations in this Final Report that will require some increase in the per-pupil provincial grant in real terms. I hope these recommendations for a modest reversal in the erosion of the province's share of the costs of board operations will be implemented. But I hope even more that the government will act on my earlier suggestion of an annual adjustment for inflation. Otherwise I do not see how we can have even intelligent debates on what the

levels of provincial expenditures for education should be. To be reasonably well informed on what we are doing about education expenditures, it is necessary that we first state clearly how much the change in the per-pupil grant will have to be in a given year to compensate for price changes since the previous year. We can then make the decision to keep the per-pupil grant the same, to increase it or to decrease it in real terms. Whether we elect to increase or decrease per-pupil grants is less important than that we know whether or not we are in fact increasing them or decreasing them.

Appendix 3

Concluding Remarks

My concluding remarks will consist of a summary of and comments on the main findings of my investigations. The summary of my recommendations, from the Second Interim Report as well as from this Final Report, have been listed elsewhere for ready reference.

(1) Extent and Duration of Declining Enrolments

The first charge in my terms of reference required me to report upon the extent and duration of the period of declining school enrolments in our province. As early as the October 14, 1977, conference which I called, I estimated that we were facing a 10- to 15-year decline in enrolment. I was not able at that time to specify the likely trends for the long-term, i.e., for the remainder of this century, largely because the results of the 1976 census had not been tabulated and reported by single years of age, which obviously left a crucial gap in the essential information. By the date of my First Interim Report, however, these data were available, not only for Ontario but for every province, so comparisons of trends and likely developments could be made. I was, therefore, able to include in the First Interim Report projections up to the year 1986 with considerable confidence, and even give some indication of what I thought the long-term prospects were likely to be. I was confident that continued declines in elementary school enrolment would undoubtedly continue to 1986 at least and that the initial series of declines in secondary school enrolment would, with but few exceptions, occur throughout Ontario and, further, that for some school boards the declines would likely be quite severe, especially in the large cities (and even in some of the adjacent suburban areas, but not in most), even amounting in exceptional cases to losses of up to 40% or more in secondary school enrolments. It was clear, also, that these declines would continue beyond 1986, although probably not in as severe a form. All these data, plus materials on international and inter-provincial migration for the other provinces as well as Ontario (Ontario

as the pivot is vitally affected in all cases) were fully reported upon in tabular, graphic and text format. I also included references to other countries which were experiencing somewhat similar conditions and commented upon trends in fertility and other changes in the population, of Canada and these other countries. These items were the basic elements which had to be considered first in any thorough study of declining school enrolments.

I should point out, however, that it was not until much later that essential additional information on population projections became available from the provincial source, the Ministry of Treasury, Economics, and Intergovernmental Affairs (TEIGA) and from Statistics Canada.¹ The more recent data was needed because it became obvious that all their models and earlier projections had to be revised in light of unanticipated changes found in the 1976 census. I commissioned 2 population projection studies: the one from TEIGA was to include specifications of population changes by counties and districts and to outline the implications for school enrolments and school facilities; the contract with Statistics Canada asked only for nine population projections by single years of age, according to fertility and immigration levels which I specified as assumptions to be used as the parameters of their computer model. I had myself earlier calculated a set of tentative population projections in order that I might anticipate and plan how best to utilize these new data. I had by then also received preliminary figures on birth registrations in Ontario for 1976 and 1977 plus some indication of the returns for the early months of 1978. It was clear that the problem of declining school enrolments was becoming greater in extent and promised to be of longer duration than I had earlier thought possible.

Consequently, my Second Interim Report appeared in a revised form, not as originally planned as a White Paper of possibilities and alternative solutions, but as a clear statement of the likely situation in regard to school enrolments to the end of the century and as a set of specific recommendations on matters that, in light of those conditions,

¹I have just received a copy of the July, 1978, projections from the Ministry of Education, even as I write these final paragraphs.

seemed to be of an urgent nature requiring immediate action. I felt, too, that school boards should be alerted so that they might start at once on the development of short- and long-term plans to provide the solutions for the unique conditions which would affect their school systems. From our studies and from the public hearings held, as required, throughout the province, I knew that some boards would be experiencing manageable enrolment increases for many years, others would enjoy stable enrolments for the foreseeable future and many would suffer from substantial enrolment declines. I recommended that the Ministry of Education commence development of short-term and long-term plans on the provincial level.

For my Final Report, which has been somewhat delayed by the mail strike and the problems of processing data relevant to the current situation, it has been possible for me to confirm my earlier tentative projections and to prepare complementary sets of projections of school enrolments. Since we know now that births are lower again in 1978, that migration patterns are being affected adversely by economic conditions and the high rates of unemployment in Ontario, that net losses are being suffered by this province in interprovincial migration and that fertility is continuing to decrease, we can be certain that the only substantial change in enrolment trends could arise through larger international migration, at least for the short term.

Although I believe that our elementary schools will experience a period of stable enrolments after 1986 or 1987, probably even general increases on a provincial scale, it is clear that secondary school enrolments will continue to decline until 1993 or 1994, and then probably have a period of stability or increasing enrolments. I have recommended that we plan for these periods of stable and increasing enrolments. I am aware, though, that unless fertility trends are changed or unless immigration is increased, we could very well face a long period of continued slow but steady decline followed by new cycles of sharp declines around the end of this century.

Teacher supply, in terms of pre-service preparation, will prove to be a long-term problem. There will be surpluses in the immediate future,

followed by shortages near the beginnings of the next century since those in the present Teacher Boom (reflecting the Pupil Boom) will prove more than sufficient in number for many years, but will later retire in a short period leaving a gap to be filled (unless we can synchronize the staffing and training procedures to the dramatically shifting demand and supply ratios). Careful short-term and long-term planning will be required in employment and retrenchment procedures at the school board level as well as in the organization of teacher education in our university system.

(2) The Problem of Solutions

The major problems created by declining school enrolments will be associated with programs, staffing and facilities. There is no doubt that during the next 10 to 15 years all of these areas will be affected, but to varying degrees across the school boards of this province. Those boards experiencing a steady-state or increasing enrolment (at least for the present) may well face some quite different problems, especially those boards which have enrolment declines in one part (frequently due solely to population shifts) and stable or increasing enrolments in other parts.

There is no magic solution which will allow us to avoid such unhappy aspects of declining enrolments as reductions in school programs, staff dismissals, closing of classrooms and schools and busing of children over long distances. Nor are there any easy solutions to the inflation related problems that exacerbate the problems of enrolment declines. Certainly there is no single solution -- or single package of solutions -- which can be applied to all school boards. There are general principles which do apply, of course, and there are a few solutions which apply to a variety of situations. Generally speaking, however, each school board will find its problems are unique and that it must fashion solutions specifically to meet those problems. Fortunately there is a wealth of knowledge and experience upon which to draw. Indeed, enough is known about the problems and solutions that a board can secure sufficient information about tried and proven solutions to satisfy most, if not all, of its needs.

(3) Some of the Major Effects

We must accept the fact that there will be major impacts upon our schools, school systems and the students where the declines are severe. We know already that in some schools and school systems programs are being adjusted and curtailed, including programs in special education and languages, and that this will continue. Some teachers and other staff have lost their jobs and more will. Programs of teacher education will be changed greatly, and for the immediate future the pre-service element will be cut back drastically and in-service programs increased. Some classrooms will be closed and some schools vacated or used for other purposes, or sold and demolished. All this will occur rather quickly. Most of the changes will have taken place during the next 10 to 15 years.

(4) Extension of Schooling

As the Youth School, as we have traditionally known it, shrinks, the functions of our system of "education" will be extended. Presumably this extension will be done in cooperation with other ministries and agencies. Part of the surplus space and personnel may be utilized in education-oriented programs for other groups, from day-care for infants to facilities for the ever-growing group of senior citizens. The problem here will be one of cooperation and coordination, in the planning, conducting and financing of these new services. Already we can see the beginnings of the new era in the Ministry of Education's cooperation with federal agencies on manpower problems and with the Ministries of Correctional Services, Health, and of Community and Social Services. There is no shortage of pressing problems and needs, many of an extremely urgent nature for which immediate preventive measures must be introduced. But we have little or no tradition or experience in working together in solving such problems at the municipal, provincial or federal levels. The greatest, if not the only hope, is that the local community, sparked by recognized needs requiring action locally by many agencies, will serve as the starting point for just such joint endeavours, which seems to be the plan launched by the Ministry of Community and Social Services.

(5) Economic and Financial Constraints

I have made much, perhaps overly much, of the economic and financial conditions under which our schools now operate. I have, in effect, treated economic conditions and demographic developments as the two salient aspects of the new environment to which our schools must accommodate. Declining enrolments are an obvious consequence of demographic developments, but the means we are able and willing to appropriate to solve the schools' problems are determined in large measure by economic conditions. However, our propensity to allocate the product of our economic activities to the schools is not simply a function of how much we are producing or of how well the economy is performing.

The mobilizing of resources for our schools is a complex process and the work of a correspondingly complex institutional arrangement. At the most abstract level, that institutional arrangement can be described as that which exists among the provincial government, the boards of education and the citizens of Ontario in their capacities as voters, provincial taxpayers and local taxpayers. But a proper respect for the complexities of public finance in a modern bureaucratic democracy requires some concern for the roles of the Legislature, Cabinet, the ministries, government agencies, political parties, lobbies, professional organizations, unions, municipalities, ratepayer organizations and the media in affecting education expenditures and the related taxes. Because the political process that is the funding of our public school system must work through this institutional complex, it is not a simple matter to relate economic developments to the funding of education.

At this point in our history, school finance is affected more by inflation than by economic growth rates. Price changes have very different effects upon the various components of our system of school finance. As a consequence our complicated arrangement for financing of education is not working well. The aspect of this threat to the smooth functioning of our school finance system that I have dealt with at length is the problem of maintaining our traditional provincial-local partnership in funding school board operations. Short of curing inflation --

and notwithstanding any remarks I may have made implying that they could or should, I do realize that our provincial government can do relatively little about it -- the best hope for maintaining this partnership is decisive action for real-property tax reform, in particular reform that will see assessment of taxable real property follow more rapidly the changing market values of those properties.

I consider that accommodating inflation in our school finance system is first and foremost the responsibility of the provincial government. But there is another challenge related to school finance that is equally the responsibility of provincial authorities and of board members and administrators. It is, quite simply, the recognition that school expenditures will not grow in the foreseeable future as they have in recent decades. In fact, total school board expenditures, in constant value dollars, may be less in the future than they are now, and they very likely will be a smaller part of government revenues (provincial and local) and gross provincial product. As educators -- and as politicians and administrators responsible for public education -- we must learn to live within our budget constraints.

(6) Remedial Actions

I have chosen to emphasize the savings that are to be had as the results of declining enrolments. Regarding the problems of declining enrolments, I have made the points that they are primarily challenges of administration and organization, and that for the most part they will be short-lived. For all of that, I concede that the problems are real and significant, and we must act decisively to prevent them from doing damage to the pupils who will be in school while the administrative and organizational adjustments are being made.

There are many ways we can act to alleviate the negative effects of declining enrolments. It is the provincial government that has the resources to act most decisively, and it is to the provincial government that the people of this province are looking for leadership. The most obvious strategy is for the province to provide financial assistance to

the boards as they reorganize. I reemphasize that as the province does this, they are only postponing some of the savings to be had from declining enrolments, they are not foregoing those savings. And they are accepting that postponement in the interest of a smoothly functioning school system.

The boards must respond in a similar manner. They too can postpone some of the savings. They can well afford to assume some extra costs, on a temporary basis, during the period of transition. In particular, they can significantly reduce the pressures on teachers and other staff by planning their personnel needs well in advance. It should rarely happen that school employees become "suddenly" redundant. Careful personnel planning is the least expensive way to reduce the trauma of redundancy, but it may also be said that the boards can afford some "inefficiency" in the termination of redundant staff. Again, savings do not have to be realized at the first possible moment.

The first aspect of planning for declining enrolments is, of course, making the best possible projections of future demands for service and of the related personnel and other requirements. But there are other aspects of preparing for change, whether or not we call them planning. Boards can materially alleviate their present and future problems by demonstrating more willingness to assist and consult with one another, and with other agencies of municipal and provincial governments.

School and community level decision-makers must prepare themselves to see the total picture related to enrolment changes and to place local issues in their proper perspective. They must also demonstrate a willingness to negotiate for reasonable solutions -- with other boards and municipalities, with staff bargaining agents, with agencies of the province.

Teachers too will have to play a significant role in the smooth accommodation to new realities. I have been encouraged by the evidence I have seen that teachers are willing -- and eager -- to be involved in planning and reorganization. They have interests at stake, of course,

but they also share the concerns of other taxpayers for economy in the provision of education and other public services, and they maintain their tradition of putting the interests of students above all others. The school system needs, and I believe will get, active leadership from teachers, individually and through their organizations, in the reorganization of the school system.

Unquestionably, the discomforts of accommodating to new enrolment levels will fall disproportionately upon new teachers and young people wanting to be teachers. Ironically, the first effort to help them must be to "close off the pipeline". I have not recommended that we stop the production of new teachers, but I have recommended that new entries to the faculties of education be reduced by at least 50% from September, 1977, to September, 1979.

(7) Costs of Education

In addition to the comments I have made about economic and financial constraints, I offer these final observations. Because it is a labour intensive activity, the relative costs of education will, like the costs of other services, increase over time. Because it is a "superior good" we will probably buy more of it and insist on quality improvements as we become more prosperous. For all of that, though, the unit costs of education in real terms will probably increase very slowly in the foreseeable future.

Education will, for some time at least, face hard, competitive pressures from other public services. Moreover, under conditions of very slow improvements in output (and income) per worker, Ontario taxpayers and their politicians will be reluctant to increase public revenues in the foreseeable future. It will be difficult enough just to maintain per-pupil expenditures at the present real-dollar levels and to protect them from erosion by inflation.

At that first conference held by this Commission on October 14, 1977, the Minister of Education, Tom Wells, said we "cannot spend our way out of this problem" (i.e., the problems of declining enrolments).

It has been well demonstrated to me in the intervening year that the emphasis must be on spending education dollars very carefully. If the case is made well, education's priority in provincial and local budgets will be adequate to maintain the quality of education we have. We will also be able to make some selective improvements. But there certainly will be no marked increase in the real dollars per pupil available to our school system.

(8) Broader Social Issues

The phenomenon I have focused upon, declining school enrolments, is only one part of the exciting story that is the change in the age distribution of our population. In a few years other problems of re-organizing our society may make what we call the problems of declining enrolments seem simple.

I tend to emphasize the problems attendant upon demographic change. This is in large measure because I am concerned for the provision of public services, and it is never easy to accommodate public services to changing conditions. However, there will be some remarkable savings and advantages to the decrease in the ratio of children to adults in our population. For a period of a generation or more we should enjoy some significant increases in total product and product per capita (even if not per worker).

It is important that we plan and act to maximize the economic advantages of a "maturing population". We must make the most of a falling dependency ratio, not only to reap the benefits of higher rates of production but to increase capital accumulation. We will need that extra capital when the declining portion of children in the population creates another increase in the dependency ratio, in particular an increase in the ratio of pensioners to employed persons. Our ability to deal with that situation will be improved if we have high rates of production and large capital accumulation in the intervening years. The modest economies that are to be realized from declining enrolments will contribute to that capital accumulation.

And now as my long and most interesting year's labour ends, I would like to complete this Final Report with what I consider my most important recommendation:

Never lose sight of the fact that the child as the learner is not only the centre of the school system but the only reason for its existence.

During all the years I have been associated with the Ministry of Education (formerly Department of Education) and its officials, government policy has reflected a very liberal view of the educated man. All our policies and practices must recognize that there has been no change in the acceptance of this general aim of education.

The major problem in the schools to the present has been that this concept has never been fully realized in practice. It could be further threatened by the pressures and strains of declining enrolments and restricted resources. I have been very conscious of these dangers, but believe that nothing I have recommended or suggested would render it impossible for us to continue our wholehearted pursuit of our general goal.

